=> fil reg; d stat que 135; d stat que 136; d stat que 138 FILE 'REGISTRY' ENTERED AT 16:33:48 ON 29 MAR 2010 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2010 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8 DICTIONARY FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L7
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
              OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
            3 SEA FILE=REGISTRY POLYLINK L8
L9
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
              SEL L10 1- RN :
                                3 TERMS
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L12
          587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L14
L27
         22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L28
         6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
L35
              OR L12)
L7
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
              OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
              SEL L10 1- RN :
                                   3 TERMS
L12
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
              STR
```

VAR G2=N/O

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 11

CONNECT IS E2 RC AT 12

CONNECT IS E1 RC AT 14

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L17 SCR 2043

L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17

L20 STR

VAR G1=8/9

VAR G2=H/ME

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 8

DEFAULT MLEVEL IS ATOM

GGCAT IS SAT AT 9

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

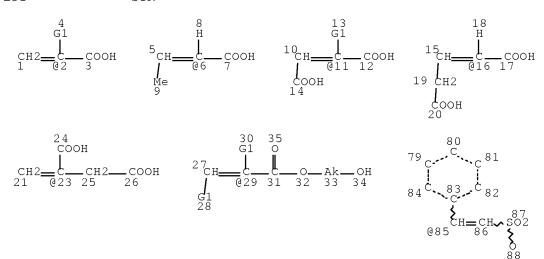
RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20

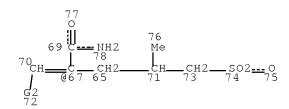
L31 STR



G4 101

$$\begin{array}{c} 38 \\ G1 \\ CH2 = C \\ 36 \\ \hline \\ & & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\$$

Page 2-A



Page 3-A VAR G1=H/ME

VAR G2=H/ME/COOH

VAR G3=CH2/97

VAR G4=2/6/11/16/23/29/37/44/54/85/67/95

NODE ATTRIBUTES:

CONNECT IS E2 RC AT CONNECT IS E2 RC AT CONNECT IS E1 RC AT 41 CONNECT IS E2 RC AT 48 CONNECT IS E1 RC AT 51 CONNECT IS E1 RC AT 63 CONNECT IS E1 RC AT 75 CONNECT IS E1 RC AT 88 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 97

STEREO ATTRIBUTES: NONE

L33	197550	SEA FILE=REGISTRY	SUB=L19	SSS FUL	L31
L34	48120	SEA FILE=REGISTRY	SPE=ON	ABB=ON	16.138/RID AND PMS/CI AND
		0>2			
L36	112029	SEA FILE=REGISTRY	SPE=ON	ABB=ON	L22 AND (L33 OR L34 OR L14
		OR L7 OR L12)			

L7	50	SEA	FILE=REGISTRY	SPE=ON	ABB=ON	25155-30-0/CRN
L14	587	SEA	FILE=REGISTRY	SPE=ON	ABB=ON	923-02-4/CRN

L15 STR



VAR G1=4/8/10/12

VAR G2=N/O

NODE ATTRIBUTES: CONNECT IS E1 RC AT 11 CONNECT IS E2 RC AT 12 CONNECT IS E1 RC AT 14 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L17 SCR 2043

L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17

L20 STR

VAR G1=8/9 VAR G2=H/ME NODE ATTRIBUTES: CONNECT IS E1 RC AT 8 DEFAULT MLEVEL IS ATOM GGCAT IS SAT AT 9 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20

L31 STR

G4 101

Page 3-A

VAR G1=H/ME

VAR G2=H/ME/COOH

VAR G3=CH2/97

VAR G4=2/6/11/16/23/29/37/44/54/85/67/95

NODE ATTRIBUTES:

CONNECT IS E2 RC AT 33

CONNECT IS E2 RC AT 39

CONNECT IS E1 RC AT 41

CONNECT IS E2 RC AT 48

CONNECT IS E1 RC AT 51

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CONNECT IS E1 RC AT 63
CONNECT IS E1 RC AT 75
CONNECT IS E1 RC AT 88
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 97

STEREO ATTRIBUTES: NONE

L33 197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34 48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND

L38 296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND (L14 OR L7)

=> fil capl

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FILE COVERS 1907 - 29 Mar 2010 VOL 152 ISS 14

FILE LAST UPDATED: 28 Mar 2010 (20100328/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'CAPLUS' FILE

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=> d que nos 158
L7
             50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN :
                                     3 TERMS
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L12
          587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L14
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10/576676

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L27
         22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
L28
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L35
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
               OR L12)
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
L48
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
L52
          5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
L56
        366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
L58
             50 SEA FILE=CAPLUS SPE=ON ABB=ON L52 AND L56 AND (L48 OR L49)
=> d que nos 155
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T.7
L8
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               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L10
               SEL L10 1- RN : 3 TERMS
L11
L12
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L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
L17
               SCR 2043
        420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L19
L20
L22
       198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L31
L33
       197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
        48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
L34
               0 > 2
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
L36
               OR L7 OR L12)
L48
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW
L49
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L53
         92433 SEA FILE=CAPLUS SPE=ON ABB=ON L36
            14 SEA FILE=CAPLUS SPE=ON ABB=ON L53 AND L48 AND L49
L55
=> d que nos 151
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L7
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L14
L15
               STR
L17
               SCR 2043
L19
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L20
               STR
L22
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L33
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L34
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L38
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L46
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L48
L49
L51
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=> d que nos 180
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L7
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L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L10
               SEL L10 1- RN: 3 TERMS
L11
L12
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L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
L17
               SCR 2043
        420517 SEA FILE=REGISTRY SSS FUL L15 AND L17
L19
L20
               STR
        198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20
L22
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L27
L28
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L31
               STR
L33
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L34
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               0>2
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
L35
               OR L12)
L36
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
               OR L7 OR L12)
L38
           296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
               (L14 OR L7)
           281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
L46
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L48
         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
          5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
L52
L53
         92433 SEA FILE=CAPLUS SPE=ON ABB=ON L36
L56
        366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
L66
        197281 SEA FILE=CAPLUS SPE=ON ABB=ON ELECTRODE#/CW
L67
         44983 SEA FILE=CAPLUS SPE=ON ABB=ON (DOUBLE LAYER?)/BI
L68
           341 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
           130 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L69
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L70
L71
          1808 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
         17744 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L72
           126 SEA FILE=CAPLUS SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR
L73
               L72)
            37 SEA FILE=CAPLUS SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
L74
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L70 AND (L71 OR L72)
L75
L76
           349 SEA FILE=CAPLUS SPE=ON ABB=ON L71 AND L72
L77
            25 SEA FILE=CAPLUS SPE=ON ABB=ON L73 AND (L74 OR L75 OR L76)
L78
            4 SEA FILE=CAPLUS SPE=ON ABB=ON L74 AND (L75 OR L76)
            2 SEA FILE=CAPLUS SPE=ON ABB=ON L75 AND L76
L79
            26 SEA FILE=CAPLUS SPE=ON ABB=ON (L77 OR L78 OR L79)
L80
=> d que nos 183
L7
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L8
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN :
                                     3 TERMS
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L12
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L14
L15
               STR
               SCR 2043
L17
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L19
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L20
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L22
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L28
L31
               STR
L33
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L34
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               0>2
L35
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
               OR L12)
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
L36
               OR L7 OR L12)
L38
           296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
               (L14 OR L7)
L46
           281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
L48
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         40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L49
          5714 SEA FILE=CAPLUS SPE=ON ABB=ON L35
L52
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L53
L56
        366578 SEA FILE=CAPLUS SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
L66
        197281 SEA FILE=CAPLUS SPE=ON ABB=ON ELECTRODE#/CW
L67
         44983 SEA FILE=CAPLUS SPE=ON ABB=ON (DOUBLE LAYER?)/BI
           341 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
L68
           130 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L69
           104 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
L70
          1808 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
L71
         17744 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L72
L73
           126 SEA FILE=CAPLUS SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR
               L72)
L74
            37 SEA FILE=CAPLUS SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
L75
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L70 AND (L71 OR L72)
L76
           349 SEA FILE=CAPLUS SPE=ON ABB=ON L71 AND L72
            12 SEA FILE=CAPLUS SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND
L83
               L46
=> d que nos 186
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L7
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
L11
               SEL L10 1- RN : 3 TERMS
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L12
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L15
               STR
L17
               SCR 2043
L19
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L20
L22
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L28
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L31
               STR
L33
        197550 SEA FILE=REGISTRY SUB=L19 SSS FUL L31
L34
         48120 SEA FILE=REGISTRY SPE=ON ABB=ON 16.138/RID AND PMS/CI AND
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
L35
               OR L12)
```

```
L36
        112029 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14
                OR L7 OR L12)
L38
            296 SEA FILE=REGISTRY SPE=ON ABB=ON L22 AND (L34 OR L33) AND
                (L14 OR L7)
L46
            281 SEA FILE=CAPLUS SPE=ON ABB=ON L38
         64955 SEA FILE=CAPLUS SPE=ON ABB=ON CAPACITOR#/CW 40291 SEA FILE=CAPLUS SPE=ON ABB=ON BINDERS+OLD/CT
L48
L49
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L53
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L56
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     197281 SEA FILE=CAPLUS SPE=ON ABB=ON ELECTRODE#/CW
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L67
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L69
L70
           104 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
L71
          1808 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
         17744 SEA FILE=CAPLUS SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L72
           126 SEA FILE=CAPLUS SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR
L73
                L72)
L74
             37 SEA FILE=CAPLUS SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
            28 SEA FILE=CAPLUS SPE=ON ABB=ON L70 AND (L71 OR L72)
L75
L76
           349 SEA FILE=CAPLUS SPE=ON ABB=ON L71 AND L72
             60 SEA FILE=CAPLUS SPE=ON ABB=ON L35 AND (L73 OR L74 OR L75 OR
L86
                L76)
=> s 158,155,151,180,183,186
           106 (L58 OR L55 OR L51 OR L80 OR L83 OR L86)
=> s 191 and patent/dt
      7122492 PATENT/DT
           102 L91 AND PATENT/DT
L92
=> s 191 not 192
             4 L91 NOT L92
L93
=> s 192 and (pd<20031024 or ad<20031024 or prd<20031024)
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                 (PD<20031024)
       4765631 AD<20031024
                 (AD<20031024)
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                 (PRD<20031024)
L94
            60 L92 AND (PD<20031024 OR AD<20031024 OR PRD<20031024)
=> s 193,194
L95
           64 (L93 OR L94)
=> d ibib abs hitind hitstr 195 1-64; fil hom
L95 ANSWER 1 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                        2009:909090 CAPLUS Full-text
DOCUMENT NUMBER:
                         152:241290
TITLE:
                         Synthesis of nano-sized core-shell acrylate latex 2ith
                        crosslinkable double-layer
                        shell
                        Zhang, Shengwen; Qiu, Teng; Cui, Jiamin; Li, Xiaoyu
AUTHOR(S):
                    School of Materials Science and Engineering, Key
Laboratory for Nanomaterials, Ministry of Education,
CORPORATE SOURCE:
```

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Beijing University of Chemical Technology, Beijing,
                         100029, Peop. Rep. China
SOURCE:
                         PMSE Preprints (2009), 101, 1510-1511
                         CODEN: PPMRA9; ISSN: 1550-6703
                         American Chemical Society
PUBLISHER:
DOCUMENT TYPE:
                         Journal; (computer optical disk)
LANGUAGE:
                         English
AΒ
     Nano-sized core-shell acrylate latex was synthesized with double -layer shell
     by emulsion polymerization Via an improved seed semi-continuously emulsion
     polymerization method, GMA and MAA was introduced into the middle layer and
     the outer shell, resp., and the size of the latex was controlled to be 65nm
     with the low emulsifying agent concentration (1.8%). The polymerization
     process was monitored by DLS. The coating film from the nano-emulsions was
     further characterized.
    42-7 (Coatings, Inks, and Related Products)
CC
     Polymerization
        (emulsion; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
     Coating materials
ΙT
        (impact- and water-resistant; synthesis of nano-sized core-shell
        acrylate latex 2ith crosslinkable double-
        laver shell)
     Stability
TΤ
        (mech.; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
     Adhesion, physical
ΙT
     Flexibility
     Luster
    Mechanical hardness
     Nanoemulsions
     Particle size distribution
     Polymer morphology
    Viscosity
        (synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
    Coating materials
ΙT
        (water-thinned; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
     1207270-68-5DP, partially-hydrolyzed
ΙT
     RL: NANO (Nanomaterial); PRP (Properties); SPN (Synthetic preparation);
     TEM (Technical or engineered material use); PREP (Preparation); USES
     (Uses)
        (core-shell; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-laver shell)
     1207270-68-5DP, partially-hydrolyzed
TΤ
     RL: NANO (Nanomaterial); PRP (Properties); SPN (Synthetic preparation);
     TEM (Technical or engineered material use); PREP (Preparation); USES
     (Uses)
        (core-shell; synthesis of nano-sized core-shell acrylate latex 2ith
        crosslinkable double-layer shell)
     1207270-68-5 CAPLUS
CN
    INDEX NAME NOT YET ASSIGNED
     CM
         1
     CRN 1321-74-0
     CMF C10 H10
     CCI IDS
```

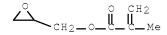


CRN 141-32-2 CMF C7 H12 O2



CM 3

CRN 106-91-2 CMF C7 H10 O3



CM 4

CRN 80-62-6 CMF C5 H8 O2

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 2 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2007:1159102 CAPLUS Full-text

DOCUMENT NUMBER: 148:451099

TITLE: Novel pigment composition and process for the

preparation thereof

INVENTOR(S): Bhagwat, Madhusudan Madan; Shukla, Brajesh; Bajaj,

Pushpa; Acharya, Badri Narayan; Chavan, Raosaheb

Balvantrao; Jassal, Manjit

PATENT ASSIGNEE(S): Jubilant Organosys Limited, India; Indian Institute of

Technology

SOURCE: Indian Pat. Appl., 17pp.

CODEN: INXXBQ

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IN 2002DE00275	А	20071005	IN 2002-DE275	20020321 <
PRIORITY APPLN. INFO.:			IN 2002-DE275	20020321 <

A process for the preparation of novel copolymers for use as thickeners AΒ and/binders in textile printing comprises copolymg. (a) at least 10% by wt of one or more carboxylic acid monomer of the kind such as herein described with (b) up to 90% by wt of one or more comonomers consisting of vinyl compds. or mixts. thereof. This thickener is an alkali swellable cross-linked polymer having both hydrophilic and hydrophobic segments. The synthetic thickener is provided in the form of an emulsion polymer using processors available in the form of emulsion which also gives thickening effect.

IC ICM C09B067-00

CC 40-6 (Textiles and Fibers) Section cross-reference(s): 42

ΙT Binders

Latex

Thickening agents

(novel pigment composition and process for the preparation thereof)

25212-88-8P, Ethyl acrylate-methacrylic acid copolymer ΙT 28411-49-6P, Diallyl phathalate-ethyl acrylate-methacrylic acid 30141-22-1P, Butyl acrylate-hydroxymethyl methacrylamide-methacrylic acid copolymer 1018957-20-4P RL: SPN (Synthetic preparation); TEM (Technical or engineered material

use); PREP (Preparation); USES (Uses)

(novel pigment composition and process for the preparation thereof) 25212-88-8P, Ethyl acrylate-methacrylic acid copolymer ΙT

28411-49-6P, Diallyl phathalate-ethyl acrylate-methacrylic acid 30141-22-1P, Butyl acrylate-hydroxymethyl methacrylamide-methacrylic acid copolymer 1018957-20-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(novel pigment composition and process for the preparation thereof) 25212-88-8 CAPLUS

2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate (CA INDEX CN NAME)

CM 1

RN

CRN 140-88-5 CMF C5 H8 O2



CM 2

CRN 79-41-4 CMF C4 H6 O2

RN 28411-49-6 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 1,2-di-2-propen-1-yl ester, polymer with ethyl 2-propenoate and 2-methyl-2-propenoic acid (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

CM 2

CRN 131-17-9 CMF C14 H14 O4

CM 3

CRN 79-41-4 CMF C4 H6 O2

RN 30141-22-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {\rm H2C} \quad {\rm O} \\ {\rm II} \quad {\rm II} \\ {\rm Me} \quad {\rm C-C-NH-CH2-OH} \end{array}$$

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

RN 1018957-20-4 CAPLUS

CN 1,2-Benzenedicarboxylic acid, 1,2-di-2-propen-1-yl ester, polymer with 1,4-bis(2-ethylhexyl) (2Z)-2-butenedioate, ethyl 2-propenoate and 2-methyl-2-propenoic acid (CA INDEX NAME)

CM 1

CRN 142-16-5 CMF C20 H36 O4

Double bond geometry as shown.

$$0 \qquad \qquad 0 \qquad \qquad Bu-n$$

CM 2

CRN 140-88-5 CMF C5 H8 O2

$$\texttt{EtO-C-CH-CH}_2$$

CRN 131-17-9 CMF C14 H14 O4

CM 4

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 3 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:446219 CAPLUS Full-text

DOCUMENT NUMBER: 144:479494

TITLE: Supercapacitor having electrode material comprising

single-wall carbon nanotubes and process for making

the same

INVENTOR(S): Liu, Tao; Kumar, Satish

PATENT ASSIGNEE(S): Georgia Tech Research Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060098389	A1	20060511	US 2003-609725	20030630 <
US 7061749	В2	20060613		
PRIORITY APPLN. INFO.:			US 2002-393270P P	20020701 <

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to a supercapacitor, also known as an elec. double-layer capacitor or ultracapacitor, having electrode material comprising single-wall carbon nanotubes. The carbon nanotubes can be derivatized with functional groups. The electrode material is made by preparing a polymer-nanotube

suspension comprising polymer and nanotubes, forming the polymer-nanotube suspension into a polymer-nanotube composite of the desired form, carbonizing the polymer-nanotube composite to form a carbonaceous polymer-nanotube material, and activating the material. The supercapacitor includes electrode material comprising activated carbonaceous polymer-nanotube material in contact with current collectors and permeated with an electrolyte, which may be either fluid or solid. In the case of a fluid or compressible electrolyte, an electrolyte-permeable separator or spacer is interposed between the electrodes to keep the electrodes from shorting. The supercapacitor made with electrodes comprising underivatized single-wall carbon nanotubes and polymer that has been carbonized and activated appears to operate as a non-Faradaic supercapacitor.

INCL 361502000

CC 76-10 (Electric Phenomena)

IT Capacitor electrodes

Capacitors

(double layer; supercapacitor having electrode

material comprising single-wall carbon nanotubes and process for making)

IT Electrolytic capacitors

(super-; supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

IT Capacitor electrodes

Electrolytes

(supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

IT 9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinylchloride 24968-79-4, Acrylonitrile-methyl acrylate copolymer 25014-41-9, Polyacrylonitrile 27056-80-0, Acrylonitrile-itaconic acid-methyl acrylate copolymer

RL: RCT (Reactant); RACT (Reactant or reagent)

IT 27056-80-0, Acrylonitrile-itaconic acid-methyl acrylate
 copolymer

RL: RCT (Reactant); RACT (Reactant or reagent)

(supercapacitor having electrode material comprising single-wall carbon nanotubes and process for making)

RN 27056-80-0 CAPLUS

CN Butanedioic acid, 2-methylene-, polymer with methyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 107-13-1 CMF C3 H3 N

H 2 C — C H — C — N

CM 2

CRN 97-65-4 CMF C5 H6 O4

$$\begin{matrix} & \text{CH}_2 \\ \text{II} \\ \text{HO}_2\text{C} - \text{CH}_2 - \text{CO}_2\text{H} \end{matrix}$$

CRN 96-33-3 CMF C4 H6 O2

0 MeO_C_CH__CH_

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS

RECORD (13 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 4 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:253567 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 142:302077

TITLE: Ceramic green sheet, and its use in multilayer ceramic

electronic component and its manufacture

INVENTOR(S): Ito, Eiji; Sawada, Akemi
PATENT ASSIGNEE(S): Murata Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005075673	A	20050324	JP 2003-306831	20030829 <
PRIORITY APPLN. INFO.:			JP 2003-306831	20030829 <

AB The sheet contains ceramic powder and a binder with crystalline side chain content 60-90 weight%. The electronic component is manufactured by mixing ceramic powder with the binder and a solvent to give a slurry, forming the slurry to green sheets, stacking and press-bonding the sheets, and firing the resulting laminate. The green sheets have improved adhesion to prevent peeling of the electronic component.

IC ICM C04B035-632

ICS H01G004-12; H01G004-30

CC 57-2 (Ceramics)

Section cross-reference(s): 76

IT Binders

Electric apparatus

(ceramic green sheet containing binder with crystalline side chain for manufacture of

multilayer ceramic electronic component)

IT Ceramic capacitors

(multilayer; ceramic green sheet containing binder with crystalline side chain

for manufacture of multilayer ceramic electronic component)

IT 27756-15-6, Acrylic acid-stearyl methacrylate copolymer

```
147026-71-9, Acrylic acid-ethyl methacrylate-stearyl methacrylate
     copolymer 847939-38-2, Acrylic acid-ethyl methacrylate-methyl
     acrylate-stearyl methacrylate copolymer 847939-40-6, Acrylic
     acid-ethyl methacrylate-methyl acrylate-naphthyl methacrylate copolymer
     847939-42-8, Acrylic acid-ethyl methacrylate-heptadecyl
     methacrylate-methyl acrylate copolymer
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (binder; ceramic green sheet containing binder with crystalline side chain
for
       manufacture of multilayer ceramic electronic component)
     72058-59-4, Acrylic acid-ethyl methacrylate-methyl acrylate
ΙT
     copolymer
     RL: TEM (Technical or engineered material use); USES (Uses)
        (binder; ceramic green sheet containing binder with crystalline side chain
for
       manufacture of multilayer ceramic electronic component)
ΙT
     27756-15-6, Acrylic acid-stearyl methacrylate copolymer
     147026-71-9, Acrylic acid-ethyl methacrylate-stearyl methacrylate
     copolymer 847939-38-2, Acrylic acid-ethyl methacrylate-methyl
     acrylate-stearyl methacrylate copolymer 847939-40-6, Acrylic
     acid-ethyl methacrylate-methyl acrylate-naphthyl methacrylate copolymer
     847939-42-8, Acrylic acid-ethyl methacrylate-heptadecyl
     methacrylate-methyl acrylate copolymer
     RL: MOA (Modifier or additive use); TEM (Technical or engineered material
     use); USES (Uses)
        (binder; ceramic green sheet containing binder with crystalline side chain
for
       manufacture of multilayer ceramic electronic component)
RN
     27756-15-6 CAPLUS
     2-Propenoic acid, 2-methyl-, octadecyl ester, polymer with 2-propenoic
CN
     acid (CA INDEX NAME)
     CM
     CRN 32360-05-7
     CMF C22 H42 O2
 Me-(CH<sub>2</sub>)<sub>17</sub>-0-C-Me
    CM
          2
     CRN 79-10-7
     CMF C3 H4 O2
RN
    147026-71-9 CAPLUS
     2-Propenoic acid, 2-methyl-, ethyl ester, polymer with octadecyl
CN
```

2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 32360-05-7 CMF C22 H42 O2

CM 2

CRN 97-63-2 CMF C6 H10 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 847939-38-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl 2-propenoate, octadecyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7 CMF C22 H42 O2

CM 2

CRN 97-63-2 CMF C6 H10 O2

CRN 96-33-3 CMF C4 H6 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 847939-40-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl 2-propenoate, naphthalenyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 30996-20-4 CMF C14 H12 O2 CCI IDS



CM 2

CRN 97-63-2 CMF C6 H10 O2

CRN 96-33-3 CMF C4 H6 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 847939-42-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with heptadecyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 6140-75-6 CMF C21 H40 O2

CM 2

CRN 97-63-2 CMF C6 H10 O2

CM 3

CRN 96-33-3 CMF C4 H6 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

IT 72058-59-4, Acrylic acid-ethyl methacrylate-methyl acrylate

copolymer

RL: TEM (Technical or engineered material use); USES (Uses) (binder; ceramic green sheet containing binder with crystalline side chain

for

manufacture of multilayer ceramic electronic component)

RN 72058-59-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 97-63-2 CMF C6 H10 O2

CM 2

CRN 96-33-3 CMF C4 H6 O2

$$MeO = \overset{\circlearrowleft}{\text{C-CH}} \text{CH}_2$$

CM 3

CRN 79-10-7

CMF C3 H4 O2

0 HO_C_CH__CH2

L95 ANSWER 5 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:216247 CAPLUS Full-text

DOCUMENT NUMBER: 142:289655

TITLE: Electrode layer forming material , electrode layer,

its manufacture, the electrode, and electrochemical

device

INVENTOR(S): Mori, Hidekazu; Yamakawa, Masahiro

PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005063846	A	20050310	JP 2003-293316	20030814 <
PRIORITY APPLN. INFO.:			JP 2003-293316	20030814 <

The material, especially for a battery or a capacitor, is obtained by mixing an electrode active mass with polymer particles which contains a conductive aid and a binder. The material is manufactured by mixing the conductive aid with a polymerizable monomer to obtain a monomer composition; dispersion polymerizing, emulsion polymerizing, suspension polymerizing or microsuspension polymerizing the composition in an aqueous medium to obtain polymer particles; and mixing the polymer particles with the an electrode active mass. The electrode layer is obtained by molding the above material. The electrode has the above electrode layer laminated on a conductive substrate. The device, especially a double-layer capacitor, is obtained by mixing an electrode active mass with polymer particles which contains an electrode structure, obtained by laminating or winding the above electrode, a case storing an electrolyte and the electrode structure, and a sealing body sealing the opening of the case.

IC ICM H01M004-02

ICS H01G009-00; H01G009-058; H01G009-155; H01G009-22; H01M004-04; H01M004-06; H01M004-62

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 52

IT Battery electrodes

Capacitor electrodes

(compns. and manufacture of electrode materials for batteries and double layer capacitors)

IT Carbon black, uses

RL: DEV (Device component use); USES (Uses)

(compns. and manufacture of electrode materials for batteries and double layer capacitors)

IT Capacitors

(double layer; compns. and manufacture of electrode materials for batteries and double layer capacitors)

IT 7440-44-0, Activated carbon, uses

RL: DEV (Device component use); USES (Uses)

(activated; compns. and manufacture of electrode materials for batteries

and

ΙT

double layer capacitors)

IT 7440-06-4, Platinum, uses 25036-16-2, Butyl

acrylate-methacrylic acid-styrene copolymer

RL: DEV (Device component use); USES (Uses)

(compns. and manufacture of electrode materials for batteries and double laver capacitors)

25036-16-2, Butyl acrylate-methacrylic acid-styrene copolymer

RL: DEV (Device component use); USES (Uses)

(compns. and manufacture of electrode materials for batteries and

double layer capacitors)

RN 25036-16-2 CAPLUS

 ${\tt CN}$ 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and

ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2

CMF C7 H12 O2

CM 2

CRN 100-42-5

CMF C8 H8

H2C==CH-Ph

CM 3

CRN 79-41-4

CMF C4 H6 O2

L95 ANSWER 6 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:121238 CAPLUS Full-text

DOCUMENT NUMBER: 142:199547

TITLE: Binder with good smoothness, crack resistance, and

binding properties for electrical double

layer capacitor electrodes

INVENTOR(S): Yamakawa, Masahiro; Mori, Hidekazu

PATENT ASSIGNEE(S): Zeon Corporation, Japan SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.			KIND DATE				APPLICATION NO.				DATE							
	WO	2005	0132	98		A1		2005	0210		WO 2	004-	JP11.	503		2	0040	804	<
		W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,	
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	
			NO,	NΖ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
			ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
		RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑM,	
			ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	
			SN,	TD,	ΤG														
		1830				А		2006	0906		CN 2	004-	8002	1968		2	0040	304	<
	CN	1005	5284.	2		С		2009	1021										
	KR	2006	0586	97		А		2006	0530		KR 2	006-	7023	29		2	0060.	202	<
	US	20080	0011	986		A1		2008	0117		US 2	007-	5671	19		2	0070	118	<
PRIOR	ITI.	APP	LN.	INFO	.:						JP 2	003-	2861	76		A 2	0030	304	<
											WO 2	004-	JP11.	503	,	W 2	0040	304	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- A binder consists of a copolymer with glass transition temperature $\leq 10^{\circ}$ comprising (A) monomer units derived from ≥1 compound CH2:CR1COOR2, which the glass transition temperature of the homopolymer is lower than 0° and (B) monomer units derived from ≥1 compound selected from alkyl acrylates, alkyl methacrylates, aromatic vinyl compds., and α, β -unsatd. nitriles, which the glass transition temperature of the homopolymer is higher than 0° (A + B = \geq 90% based on total polymers), wherein R1 = H or Me and R2 = alkyl or cycloalkyl. Thus, 2-ethylhexyl acrylate 83, acrylonitrile 15, and methacrylic acid 2% were polymerized to give a 30%-solids copolymer solution with glass transition temperature -44° and particle diameter 130 nm, aqueous ammonia solution was added therein, 12.5 parts of which (total solid content 40%) was mixed with activated charcoal powder 100, Ketjen Black 1.5, and acetylene black 3, and DN 10L CM-cellulose ammonium salt 2 parts, water was added therein (total solid content 41%), applied on an aluminum foil, dried at 80° for 30 min, and pressed to give an electrode, which was fabricated into a capacitor, showing surface roughness 1.4 µm, peel strength 0.1 N/cm, internal resistance 3.3 Ω , and good crack and electrolyte resistance.
- IC ICM H01G009-058

ICS C08F220-18

- CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 76
- ST binder smoothness crack resistance binding property; elec double layer capacitor electrode; ethylhexyl acrylate acrylonitrile methacrylic acid copolymer ammonium salt prepn
- IT Capacitors

(double layer; preparation of binders with good smoothness, crack resistance, and binding properties for electouble layer capacitor electrodes)

IT Binders

Electrodes

```
(preparation of binders with good smoothness, crack resistance, and binding
       properties for elec. double layer capacitor
       electrodes)
ΙT
     Acrylic polymers, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (preparation of binders with good smoothness, crack resistance, and binding
       properties for elec. double layer capacitor
        electrodes)
     35919-18-7P
                  37001-63-1P, 2-Ethylhexyl acrylate-methacrylic
ΙT
     acid-methyl methacrylate copolymer ammonium salt 42884-82-2P,
     Butyl acrylate-methacrylic acid-methyl methacrylate copolymer ammonium
            53754-89-5P
                        58479-12-2P, 2-Ethylhexyl
     acrylate-methacrylic acid-styrene copolymer ammonium salt
     69572-24-3P, Acrylonitrile-2-ethylhexyl acrylate-methacrylic acid
     copolymer ammonium salt
     RL: DEV (Device component use); IMF (Industrial manufacture); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (preparation of binders with good smoothness, crack resistance, and binding
        properties for elec. double layer capacitor
        electrodes)
ΙT
     37001-63-1P, 2-Ethylhexyl acrylate-methacrylic acid-methyl
     methacrylate copolymer ammonium salt 42884-82-2P, Butyl
     acrylate-methacrylic acid-methyl methacrylate copolymer ammonium salt
     58479-12-2P, 2-Ethylhexyl acrylate-methacrylic acid-styrene
     copolymer ammonium salt 69572-24-3P,
     Acrylonitrile-2-ethylhexyl acrylate-methacrylic acid copolymer ammonium
     RL: DEV (Device component use); IMF (Industrial manufacture); TEM
     (Technical or engineered material use); PREP (Preparation); USES (Uses)
        (preparation of binders with good smoothness, crack resistance, and binding
       properties for elec. double layer capacitor
        electrodes)
RN
     37001-63-1 CAPLUS
CN
     2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and
     methyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)
     CM
         1
     CRN 25133-98-6
         (C11 H20 O2 . C5 H8 O2 . C4 H6 O2)x
     CMF
     CCI PMS
              2
         CM
         CRN 103-11-7
          CMF C11 H20 O2
    СH2—О—С—СН——СН2
 Et-CH-Bu-n
```

CRN 80-62-6 CMF C5 H8 O2

3

CM

CRN 79-41-4 CMF C4 H6 O2

RN 42884-82-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (CA INDEX NAME)

CM 1

CRN 25035-69-2

CMF (C7 H12 O2 . C5 H8 O2 . C4 H6 O2) \times

CCI PMS

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 58479-12-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene and 2-ethylhexyl 2-propenoate, ammonium salt (CA INDEX NAME)

CM 1

CRN 26636-08-8

CMF (C11 H20 O2 . C8 H8 . C4 H6 O2)x

CCI PMS

CM 2

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 69572-24-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-ethylhexyl 2-propenoate and 2-propenenitrile, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 26636-10-2

CMF (C11 H20 O2 . C4 H6 O2 . C3 H3 N) \times

CCI PMS

CM 2

CRN 107-13-1 CMF C3 H3 N

 $H \supseteq C \longrightarrow C H \longrightarrow C \longrightarrow N$

CM 3

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} & \overset{\circ}{\text{CH}_2} - \circ - \overset{\circ}{\text{C}} - \text{CH} \underline{\longrightarrow} \text{CH}_2 \\ \text{Et} - \overset{\circ}{\text{CH}} - \text{Bu-n} \end{array}$$

CM 4

CRN 79-41-4 CMF C4 H6 O2

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 7 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:392345 CAPLUS Full-text

DOCUMENT NUMBER: 140:398487

TITLE: Method for producing water-soluble acrylic binder,

ceramic slurry composition, and monolithic ceramic

electronic parts

INVENTOR(S): Takata, Masachika; Kodou, Masaru; Miyazaki, Makoto;

Tanaka, Satoru

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 18 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
20031110 <--
     US 20040092652
                         A1
                               20040513
                                          US 2003-703468
     JP 2005060208
                         А
                               20050310 JP 2003-317882
                                                                   20030910 <--
     TW 248457
                         В
                               20060201
                                           TW 2003-92129761
                                                                   20031027 <--
     CN 1508209
                         Α
                               20040630
                                          CN 2003-10114101
                                                                   20031105 <--
     CN 1219014
                         С
                               20050914
     KR 2004041036
                        Α
                               20040513
                                            KR 2003-78336
                                                                   20031106 <--
                        A1
                                            US 2005-132351
                                                                   20050519 <--
     US 20050206049
                               20050922
                                           JP 2003-324798 A 20021108 <--
JP 2003-201773 A 20030725 <--
JP 2003-317002
PRIORITY APPLN. INFO.:
                                            JP 2003-317882
                                                               A 20030910 <--
                                            US 2003-703468 A3 20031110
     A ceramic slurry composition contains a mixture of a ceramic raw material
AΒ
     powder, a water-soluble acrylic binder and water. A resin component of the
     water-soluble acrylic binder has a weight average mol. weight of about 10,000
     to 500,000 and an inertial square radius in water of about 100 nm or less, and
     the alc. content of the water-soluble acrylic binder is about 5% by weight or
     less when the resin content is 40% by weight. The pH of the ceramic slurry
     composition is preferably controlled to about 8.5 to 10.
IC
     ICM C08K003-00
INCL 524556000
CC
     76-10 (Electric Phenomena)
     Section cross-reference(s): 38, 57
ΙT
      Capacitor electrodes
     Ceramic capacitors
     Ceramics
        (method for producing water-soluble acrylic binder, ceramic slurry
composition,
        and monolithic ceramic electronic parts)
     12047-27-7P, Barium titanium oxide, uses 38811-87-9P, Acrylic
ΙT
     acid-methyl acrylate-methyl methacrylate copolymer ammonium salt
     42262-65-7P, Acrylic acid-methyl acrylate copolymer ammonium salt
     57167-10-9P, Acrylic acid-butyl acrylate copolymer ammonium salt
     72863-11-7P, Acrylic acid-ethyl acrylate copolymer ammonium salt
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (method for producing water-soluble acrylic binder, ceramic slurry
composition,
        and monolithic ceramic electronic parts)
     61887-40-9, Methacrylic acid-methyl acrylate copolymer ammonium
ΙT
     salt
     RL: TEM (Technical or engineered material use); USES (Uses)
        (method for producing water-soluble acrylic binder, ceramic slurry
composition.
        and monolithic ceramic electronic parts)
     38811-87-9P, Acrylic acid-methyl acrylate-methyl methacrylate
ΙT
     copolymer ammonium salt 42262-65-7P, Acrylic acid-methyl
     acrylate copolymer ammonium salt 57167-10-9P, Acrylic
                                                  72863-11-7P,
     acid-butyl acrylate copolymer ammonium salt
     Acrylic acid-ethyl acrylate copolymer ammonium salt
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (method for producing water-soluble acrylic binder, ceramic slurry
composition,
        and monolithic ceramic electronic parts)
     38811-87-9 CAPLUS
RN
```

2-Propenoic acid, 2-methyl-, methyl ester, polymer with methyl

2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

```
CRN 27155-22-2
    CMF (C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x
    CCI PMS
         CM 2
         CRN 96-33-3
         CMF C4 H6 O2
MeO_C_CH__CH2
         CM 3
         CRN 80-62-6
         CMF C5 H8 O2
 H2C 0
         CM 4
         CRN 79-10-7
         CMF C3 H4 O2
но_С_сн__сн<sub>2</sub>
    42262-65-7 CAPLUS
RN
    2-Propenoic acid, polymer with methyl 2-propenoate, ammonium salt (CA
    INDEX NAME)
    CM 1
    CRN 25302-81-2
    CMF (C4 H6 O2 . C3 H4 O2)\times
    CCI PMS
         CM
              2
         CRN 96-33-3
         CMF C4 H6 O2
MeO_C_CH__CH2
```

```
CM
               3
         CRN 79-10-7
         CMF C3 H4 O2
 но_С_сн_сн2
     57167-10-9 CAPLUS
RN
     2-Propenoic acid, polymer with butyl 2-propenoate, ammonium salt (CA
CN
     INDEX NAME)
    CM
         1
    CRN 25119-83-9
    CMF (C7 H12 O2 . C3 H4 O2)\times
    CCI PMS
         CM
               2
         CRN 141-32-2
         CMF C7 H12 O2
         CM
               3
         CRN 79-10-7
         CMF C3 H4 O2
   _Ŭ_сн<u>—</u>сн<sub>2</sub>
    72863-11-7 CAPLUS
RN
CN
     2-Propenoic acid, polymer with ethyl 2-propenoate, ammonium salt (CA
     INDEX NAME)
    CM
         1
    CRN 25085-35-2
     CMF (C5 H8 O2 . C3 H4 O2)x
    CCI PMS
         CM
               2
```

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

IT 61887-40-9, Methacrylic acid-methyl acrylate copolymer ammonium

RL: TEM (Technical or engineered material use); USES (Uses)

(method for producing water-soluble acrylic binder, ceramic slurry composition,

and monolithic ceramic electronic parts)

RN 61887-40-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with methyl 2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 26589-39-9

CMF (C4 H6 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 96-33-3 CMF C4 H6 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 8 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:201042 CAPLUS Full-text

DOCUMENT NUMBER: 140:227491

TITLE: Multilayer ceramic capacitors, pastes for their

external electrodes, manufacture thereof, and organic

binders therefor

INVENTOR(S): Miyazaki, Makoto; Hamanaka, Kenichi

PATENT ASSIGNEE(S): Murata Mfg. Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
	JP 2004079480	A	20040311	JP 2002-242045	20020822 <		
	JP 4096661	В2	20080604				
PRIO	RITY APPLN. INFO.:			JP 2002-242045	20020822 <		

AB Alkylene glycol alkyl ester (meth)acrylates 1-40, alkyl (meth)acrylates 40-99, and comonomers 0-20% are polymerized in organic solvents to give polymers of Mn 10,000-500,000, whereto elec. conductive powders (e.g., base metals) are added and dispersed to afford the title pastes. The pastes show minimized

carbon residues and high viscosity and form thick electrode layers without stringiness phenomena.

IC ICM H01B001-22

ICS H01B013-00; H01G004-12

CC 76-10 (Electric Phenomena)
 Section cross-reference(s): 57

IT Ceramic capacitors

(multilayer; sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes)

IT Binders

Capacitor electrodes

Electrically conductive pastes

(sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes)

666722-41-4P, Ethyl methacrylate-methoxytriethylene glycol methacrylate ΙT 666722-42-5P 666722-43-6P, Ethyl methacrylate-2-ethylhexyl copolymer methacrylate-triethylene glycol monomethyl ether methacrylate copolymer 666722-44-7P, Ethyl methacrylate-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-45-8P, Ethyl methacrylate-methoxyoctaethylene glycol methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-47-0P 666722-48-1P, Acrylic acid-ethyl methacrylate-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-49-2P, Ethyl methacrylate-methacrylic acid-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-50-5P, Ethyl methacrylate-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate-styrene copolymer 666722-51-6P, Isobutyl methacrylate-triethylene glycol monomethyl ether methacrylate copolymer RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (binders; sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes)

IT 666722-48-1P, Acrylic acid-ethyl methacrylate-triethylene glycol

monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer 666722-49-2P, Ethyl methacrylate-methacrylic acid-triethylene glycol monomethyl ether methacrylate-methyl acrylate-methyl methacrylate copolymer RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (binders; sagging-resistant conductive pastes showing less carbon residue and forming thick capacitor electrodes) 666722-48-1 CAPLUS RN CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with 2-[2-(2-methoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, methyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME) 1 CM CRN 24493-59-2 CMF C11 H20 O5

$$\stackrel{\text{H 2 C}}{\text{Me}} \stackrel{\text{O}}{=} \stackrel{\text{C}}{\text{C}} \stackrel{\text{O}}{=} \text{CH}_2 - \text{CH}_2$$

CM 2

CRN 97-63-2

CMF C6 H10 O2

CM

CRN 96-33-3 CMF C4 H6 O2

$$MeO = C = CH = CH_2$$

CM 4

CRN 80-62-6

CMF C5 H8 O2

RN 666722-49-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate, 2-[2-(2-methoxyethoxy)ethoxy]ethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and methyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 24493-59-2 CMF C11 H20 O5

CM 3

CRN 96-33-3 CMF C4 H6 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CH2 Me_C_CO2H

L95 ANSWER 9 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:100619 CAPLUS Full-text

DOCUMENT NUMBER: 140:131173

TITLE: Electrolyte compositions for batteries and capacitors

INVENTOR(S): Nakamura, Michiei; Yoshikawa, Sachio; Takizawa,

Minoru; Fujita, Toshiyasu; Doi, Seiji; Kihara,

Nobuhiro

Dainichiseika Color & Chemicals Mfg. Co., Ltd., Japan PATENT ASSIGNEE(S):

U.S. Pat. Appl. Publ., 18 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: Enalish

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040023121	 A1	20040205	US 2003-624671	20030723 <
TW 283085	В	20070621	TW 2003-92119927	20030722 <
JP 2004162019	A	20040610	JP 2003-200256	20030723 <
JP 4164005	B2	20081008		
EP 1403948	A2	20040331	EP 2003-16544	20030724 <
EP 1403948	А3	20090401		
R: AT, BE, CH,	DE, DK	E, ES, FR, C	GB, GR, IT, LI, LU, NL,	, SE, MC, PT,
IE, SI, LT,	LV, FI	, RO, MK, C	CY, AL, TR, BG, CZ, EE,	, HU, SK
KR 2004011381	A	20040205	KR 2003-52242	20030729 <
CN 1490355	A	20040421	CN 2003-158868	20030730 <
CN 100540605	С	20090916		
JP 2008288210	A	20081127	JP 2008-149107	20080606 <
US 20100036060	A1	20100211	US 2009-578634	20091014 <
PRIORITY APPLN. INFO.:			JP 2002-221903	A 20020730 <
			JP 2003-200256	A3 20030723 <
			US 2003-624671	B3 20030723 <
			US 2003-624671	B3 20030723 <

AΒ Ion-conducting (co)polymer media and ion-conducting oligomer media close in ion conductivity to organic-solvent-based electrolytes can be produced easily and safely on industrial scale. These ion-conducting (co)polymer media use (co)polymers containing at least one cyclocarbonato group, and these ionconducting oligomer media employ oligomers containing at least two cyclocarbonato groups.

ICM H01M010-40 IC

ICS H01G009-025

INCL 429317000; 252062200; 429307000; 361525000; 525410000

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 37, 38, 76

IT Capacitors

(double layer; electrolyte compns. for batteries
and capacitors)

IT 56-81-5DP, 1,2,3-Propanetriol, glycidyl derivs., polymers, reaction products with carbon dioxide 77-99-6DP, glycidyl derivs., polymers, reaction products with carbon dioxide 115-77-5DP, glycidyl derivs., polymers, reaction products with carbon dioxide 25067-05-4DP, reaction products with carbon dioxide 28472-86-8DP, reaction products with carbon dioxide 38811-11-9DP, reaction products with carbon dioxide 54847-49-3DP, reaction products with carbon dioxide 54847-49-3DP, reaction products with carbon dioxide 58782-18-6DP, reaction products with carbon dioxide 75503-85-4DP, reaction products with carbon dioxide 149797-02-4DP, reaction products with carbon dioxide RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

use); PREP (Preparation); USES (Uses)
(electrolyte cpmpns. for batteries and capacitors)

IT 29734-45-0DP, reaction products with carbon dioxide 75503-85-4DP, reaction products with carbon dioxide

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(electrolyte cpmpns. for batteries and capacitors)

RN 29734-45-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with 2-ethylhexyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 106-91-2 CMF C7 H10 O3

CM 2

CRN 103-11-7 CMF C11 H20 O2

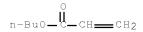
RN 75503-85-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CRN 868-77-9 CMF C6 H10 O3

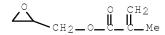
CM 2

CRN 141-32-2 CMF C7 H12 O2



CM 3

CRN 106-91-2 CMF C7 H10 O3



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L95 ANSWER 10 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:988520 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 140:28391

TITLE: Polymer nanoparticle-based binder compositions for

ink-jet inks

INVENTOR(S): Fu, Zhenwen; Graziano, Louis Christopher; Lein, George

Max; Hallden-Abberton, Michael Paul; Lundquist, Eric

Gustave; Devonport, Wayne : Rohm and Haas Company, USA

PATENT ASSIGNEE(S): Rohm and Haas Company, USOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1371697	A2	20031217	EP 2003-253676	20030611 <

```
EP 1371697
                         АЗ
                                20040102
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
     US 20030232916
                         A1
                               20031218
                                         US 2003-461948
                                                                 20030613 <--
     US 20040063809
                         A1
                                20040401
                                          US 2003-462110
                                                                   20030613 <--
                                         CN 2003-154511
     CN 1487042
                         Α
                                20040407
                                                                   20030613 <--
     CN 1283739
                         С
                               20061108
                        A 20040817
A 20040909
B 20051021
A 20070906
     BR 2003002071
                                          BR 2003-2071
                                                                   20030613 <--
     JP 2004250659
                                          JP 2003-168704
                                                                   20030613 <--
     TW 242034
                                           TW 2003-92116145
                                                                   20030613 <--
     JP 2007224318
                                           JP 2007-155690
                                                                   20070612 <--
                                            US 2002-389043P
                                                              P 20020614 <--
PRIORITY APPLN. INFO.:
                                            US 2002-414599P
                                                               P 20020930 <--
                                            US 2002-414599P P
US 2002-414597P P
                                                                   20020930 <--
                                            US 2002-414600P
                                                              P 20020930 <--
                                            JP 2003-168790
                                                              A3 20030613 <--
AΒ
     A binder composition comprises polymeric nanoparticles (PNPs) having a mean
     diameter from 1 to 50 nm, the PNPs comprising as polymerized units 1-20%
     (based on dry polymer weight) of a curable composition unreactive at ambient
     conditions but capable of being initiated thermally, chemical or photochem.
     The binder is used in ink-jet ink compns. to improve durability of inks
     printed on paper, plastics, leather and textiles. Thus, Bu acrylate (169), Me
     methacrylate (169), trimethylolpropane triacrylate (45), methacrylic acid
     (23), and itaconic acid (45 \text{ g}) were polymerized and neutralized with ammonium
     hydroxide to give a copolymer nanoparticle dispersion useful as a binder for
     ink-jet inks.
     ICM C09D011-00
IC
     ICS C08J003-07; C08F002-06; C08J003-26
     37-6 (Plastics Manufacture and Processing)
CC
     Section cross-reference(s): 40, 42
ΙT
     Polyurethanes, reactions
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (acrylates, crosslinking agents; preparation of polymer
        nanoparticle binders for ink-jet inks)
    Amines, reactions
ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (alkoxylated, tertiary, crosslinking agents; preparation of
       polymer nanoparticle binders for ink-jet inks)
     Polyoxyalkylenes, reactions
IT
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (amino-terminated, crosslinking agents; preparation of polymer
       nanoparticle binders for ink-jet inks)
ΙT
     Binders
     Coloring materials
      Crosslinking
      Crosslinking agents
     Nanoparticles
     Pigments, nonbiological
        (preparation of polymer nanoparticle binders for ink-jet inks)
     56-81-5, Glycerol, reactions 919-30-2, 3-Triethoxysilylpropylamine
     13822-56-5, 3-Trimethoxysilylpropylamine 64852-22-8, Jeffamine T 3000
     133687-20-4, Ucarlink XL 20 178153-95-2, CN 981 200139-08-8, Desmodur
     XP 7063 212626-19-2, Epocros K 2020E 304466-12-4, Ethox SAM 50
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinking agent; preparation of polymer nanoparticle binders
        for ink-jet inks)
     75-13-8D, Isocyanic acid, esters, polymers 30969-75-6D, Oxazoline,
ΙT
     polymers
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (crosslinking agents; preparation of polymer nanoparticle binders
```

for ink-jet inks)

IT 136844-56-9P, Butyl acrylate-methacrylic acid-methyl methacrylate-trimethylolpropane triacrylate copolymer

633357-53-6P 633357-55-8P 633357-57-0P 633357-59-2P 633357-61-6P 633357-63-8P 633357-65-0P 633357-67-2P 633357-69-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of polymer nanoparticle binders for ink-jet inks)

136844-56-9P, Butyl acrylate-methacrylic acid-methyl

methacrylate-trimethylolpropane triacrylate copolymer

633357-53-6P 633357-55-8P 633357-57-0P 633357-59-2P 633357-61-6P 633357-63-8P 633357-65-0P 633357-67-2P 633357-69-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of polymer nanoparticle binders for ink-jet inks)

RN 136844-56-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,1'-[2-ethyl-2-[[(1-oxo-2-propen-1-yl)oxy]methyl]-1,3-propanediyl] di-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 15625-89-5 CMF C15 H20 O6

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

RN 633357-53-6 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-52-5

CMF (C15 H20 O6 . C7 H12 O2 . C5 H8 O2 . C5 H6 O4 . C4 H6 O2) \mathbf{x}

CCI PMS

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 97-65-4 CMF C5 H6 O4

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-55-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, N-(hydroxymethyl)-2-propenamide and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-54-7

CMF (C15 H20 O6 . C7 H12 O2 . C5 H8 O2 . C4 H7 N O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CM 3

CRN 924-42-5

CMF C4 H7 N O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-57-0 CAPLUS

CN Butanoic acid, 3-oxo-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-56-9

CMF (C15 H20 O6 . C10 H14 O5 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 21282-97-3

CMF C10 H14 O5

$$\begin{array}{c} {}^{\rm H\,2\,C} \\ {}^{\rm M\,e} \\ {}^{\rm L\,C} \\ {}^{\rm C\,C} \\ {}^{\rm C\,C\,C\,H\,2} \\ {}^{\rm C\,H\,2\,C\,H\,2\,-\,C$$

CM 3

CRN 15625-89-5 CMF C15 H20 O6

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-59-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-58-1

CMF (C15 H20 O6 . C7 H12 O2 . C7 H10 O3 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 106-91-2 CMF C7 H10 O3

CM 5

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

RN 633357-61-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 2-(phosphonooxy)ethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-60-5

CMF (C15 H20 O6 . C7 H12 O2 . C6 H11 O6 P . C5 H8 O2 . C4 H6 O2) \mathbf{x}

CCI PMS

H2O3PO-CH2-CH2-O-

CM 2

CRN 24599-21-1 CMF C6 H11 O6 P

CM 3

CRN 15625-89-5 CMF C15 H20 O6

CM 4

CRN 141-32-2

CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-63-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, methyl 2-methyl-2-propenoate and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-62-7

CMF (C15 H20 O6 . C10 H20 O5 Si . C7 H12 O2 . C5 H8 O2 . C4 H6 O2) $\mathbf x$

CCI PMS

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-65-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-[[3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl]oxy]ethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-64-9

CMF (C16 H22 O3 . C15 H20 O6 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x CCI PMS

CM 2

CRN 68169-03-9 CMF C16 H22 O3 CCI IDS



CM 3

CRN 15625-89-5 CMF C15 H20 O6

CM 4

CRN 141-32-2 CMF C7 H12 O2

$$n-BuO - C - CH - CH_2$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

RN 633357-67-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-(dimethylamino)ethyl 2-methyl-2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-66-1

CMF (C15 H20 O6 . C8 H15 N O2 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2) x

CCI PMS

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CM 3

CRN 2867-47-2 CMF C8 H15 N O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

RN 633357-69-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, 2-furanylmethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 633357-68-3

CMF (C15 H20 O6 . C9 H10 O3 . C7 H12 O2 . C5 H8 O2 . C4 H6 O2)x

CCI PMS

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CM 3

CRN 3454-28-2

CMF C9 H10 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

OS.CITING REF COUNT: 14 THERE ARE 14 CAPLUS RECORDS THAT CITE THIS

RECORD (16 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 11 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:730571 CAPLUS Full-text

DOCUMENT NUMBER: 139:253866

TITLE: Electric double-layered capacitor

using UV-curing gel type polymer electrolyte INVENTOR(S): Cho, Byung-Won; Rhee, Hee-Woo; Cho, Won-Il; Kim,

Hyun-Joong; Yang, Chun-Mo; Kim, Yong-Tae

PATENT ASSIGNEE(S): Korea Institute of Science and Technology, S. Korea

SOURCE: U.S., 10 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAI	CENT NO.	KIND	DATE	APPLICATION NO.		DATE
US	6621685	B1	20030916	US 2003-339398		20030110 <
KR	2003079325	A	20031010	KR 2002-18286		20020403 <
JP	2003303739	A	20031024	JP 2003-34697		20030213 <
PRIORITY	APPLN. INFO.:			KR 2002-18286	Α	20020403 <

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to an elec. double-layered capacitor using an UV-curing gel type polymer electrolyte. Disclosed is an elec. double-layered capacitor fabricated by inserting a UV-curing gel type polymer electrolyte having excellent characteristics of ion conductivity, adhesion to electrode, compatibility with an organic solvent electrolyte, mech. stability, permeability, and applicability to process, between electrodes. Accordingly, the present invention increases its storage capacitance, reduces self-discharge of electricity, and decreases inner cell resistance.

IC ICM H01G009-00

INCL 361503000; 361508000; 361512000; 361523000; 361528000; 252062200; 429309000; 429326000

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 38, 72

ST electronic device fabrication double layer capacitor gel polymer electrolyte

IT Fluoropolymers, uses

RL: NUU (Other use, unclassified); USES (Uses)
(UV curing agent; elec. double-layered capacitor using UV-curing gel type polymer electrolyte)

IT Capacitor electrodes

Capacitors

(double layer; elec. double-

layered capacitor using UV-curing gel type polymer electrolyte)

IT Electronic device fabrication

Fillers

Polymer electrolytes

(elec. double-layered capacitor using UV-curing gel type polymer electrolyte)

IT Zeolites (synthetic), uses

RL: NUU (Other use, unclassified); USES (Uses) (filler; elec. double-layered capacitor using

UV-curing gel type polymer electrolyte)

IT Membranes, nonbiological

Textiles

(polymer electrolyte support; elec. double-layered capacitor using UV-curing gel type polymer electrolyte)

IT Polyesters, uses

RL: TEM (Technical or engineered material use); USES (Uses) (polymer electrolyte support; elec. double-layered capacitor using UV-curing gel type polymer electrolyte)

IT 9002-86-2, Polyvinyl chloride 9010-76-8, Acrylonitrile vinylidenechloride copolymer 9011-14-7, Polymethylmethacrylate 9011-17-0, Hexafluoropropylene vinylidene fluoride copolymer 24937-79-9, Kynar 761 24968-79-4, Acrylonitrile methyl acrylate copolymer 25014-41-9, Polyacrylonitrile 25086-15-1, Methylmethacrylate methacrylic acid copolymer 25721-76-0, Polyethyleneglycoldimethacrylate 26570-48-9, Polyethyleneglycoldiacrylate

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RL: NUU (Other use, unclassified); USES (Uses)
        (UV curing agent; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
ΙT
    7440-44-0, Carbon, uses
    RL: DEV (Device component use); USES (Uses)
        (capacitor electrode; elec. double-layered
        capacitor using UV-curing gel type polymer electrolyte)
ΙT
    102-71-6, Triethanol amine, uses 102-82-9, Tributylamine 103-83-3,
    N-Benzyldimethylamine
    RL: CAT (Catalyst use); USES (Uses)
        (curing accelerator; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
    84-51-5, 2-Ethylanthraquinone 84-65-1, Anthraquinone 93-97-0, Benzoyl
ΙT
    benzoate 119-61-9, Benzophenone, uses 120-51-4, Benzyl benzoate
    131-09-9, 2-Chloroanthraquinone 574-09-4, Ethyl benzoin ether
    947-19-3, 1-Hydroxycyclohexyl phenyl ketone 2648-61-5
    Ethanone, 2-methoxy-1,2-diphenyl- 5162-03-8, 2-Chlorobenzophenone
    5211-62-1, 2-Methoxyphenylacetone 5293-97-0, 2,2'-DichloroBenzophenone
    6175-45-7, 2,2-Diethoxyacetophenone 6652-28-4, Isopropyl benzoin ether
    6652-29-5, Benzoin phenyl ether 7473-98-5,
                                               7783-20-2, Ammonium sulfate,
    2-Hydroxy-2-methyl-1-phenylpropane-1-one
           24650-42-8, 2,2-Dimethoxy-2-phenylacetophenone
    RL: NUU (Other use, unclassified); USES (Uses)
        (curing initiator; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
    121-44-8, Triethylamine, uses
ΙT
    RL: MOA (Modifier or additive use); USES (Uses)
        (elec. double-layered capacitor using UV-curing gel
       type polymer electrolyte)
                               7631-86-9, Silica, uses 12047-27-7, Barium
ΙT
    1344-28-1, Alumina, uses
    titanate (BaTiO3), uses 13463-67-7, Titanium dioxide, uses
    RL: NUU (Other use, unclassified); USES (Uses)
        (filler; elec. double-layered capacitor using
       UV-curing gel type polymer electrolyte)
    79-20-9, Methyl acetate 96-49-1, Ethylene carbonate 105-37-3, Ethyl
ΙT
                105-58-8, Diethyl carbonate 141-78-6, Ethyl acetate, uses
    propionate
    554-12-1, Methyl propionate
                                  623-53-0, Ethylmethyl carbonate
    21324-40-3, Lithium hexafluorophosphate
    RL: NUU (Other use, unclassified); USES (Uses)
        (liquid electrolyte containing; elec. double-layered
        capacitor using UV-curing gel type polymer electrolyte)
ΙT
    25038-59-9, Mylar, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (polymer electrolyte support; elec. double-layered
        capacitor using UV-curing gel type polymer electrolyte)
ΤT
    67-64-1, Acetone, miscellaneous 67-68-5, Dimethyl sulfoxide,
    miscellaneous 68-12-2, Dimethylformamide, miscellaneous 109-99-9,
    Tetrahydrofuran, miscellaneous 127-19-5, Dimethylacetamide 872-50-4,
    N-Methyl-2-pyrrolidone, miscellaneous
    RL: MSC (Miscellaneous)
        (solvent; elec. double-layered capacitor using
       UV-curing gel type polymer electrolyte)
ΙT
    25086-15-1, Methylmethacrylate methacrylic acid copolymer
    RL: NUU (Other use, unclassified); USES (Uses)
        (UV curing agent; elec. double-layered capacitor
       using UV-curing gel type polymer electrolyte)
RN
    25086-15-1 CAPLUS
    2-Propenoic acid, 2-methyl-, polymer with methyl 2-methyl-2-propenoate
CN
     (CA INDEX NAME)
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CRN 80-62-6 CMF C5 H8 O2

CM 2

CRN 79-41-4 CMF C4 H6 O2

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 12 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:675815 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 139:189545

TITLE: Anode components in solid capacitors, manufacturing

anode components, and solid electrolyte capacitors

using anode components thereof

INVENTOR(S): Ito, Masamitsu; Suenaga, Wataru; Moriyama, Minoru;

Miyamoto, Akiko

PATENT ASSIGNEE(S): Toei Kasei Co., Ltd., Japan; Dainippon Ink and

Chemicals, Inc.; Kojundo Chemicals Laboratory Co.,

Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003243261	A	20030829	JP 2002-20506	20020129 <
PRIORITY APPLN. INFO.:			JP 2001-382316 A	20011214 <

- AB The title manufacturing of anode components involves (1) coating on a substrate with a powdered valve metal dispersion containing a polymer binder in a solvent and (2) sintering the coated material. The binder is (meth)acrylate-hydroxyl (meth)acrylate copolymer. The use of the copolymer binder gives the anode components flexibility in avoiding crack formation during connection of a lead wire.
- IC ICM H01G009-052 ICS H01G009-00
 - 76-10 (Electric Phenomena)
 - Section cross-reference(s): 38
- IT Binders

CC

(acrylic polymers; anode components in solid capacitors and manufacturing

anode components and solid electrolyte capacitors using anode components thereof)

IT Capacitors

(solid electrolyte; anode components in solid capacitors and manufacturing anode components and solid electrolyte capacitors using anode components thereof)

- IT 25719-51-1, Poly-2-ethylhexyl methacrylate 38702-23-7, Butyl methacrylate-2-hydroxyethyl acrylate copolymer 579523-82-3, Butyl methacrylate-2-ethylhexyl methacrylate-Placcel FM 2D copolymer RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (binder; anode components in solid capacitors and manufacturing anode components and solid electrolyte capacitors using anode components thereof)
- IT 38702-23-7, Butyl methacrylate-2-hydroxyethyl acrylate copolymer RL: MOA (Modifier or additive use); PRP (Properties); USES (Uses) (binder; anode components in solid capacitors and manufacturing anode components and solid electrolyte capacitors using anode components thereof)

RN 38702-23-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 2-hydroxyethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CM 2

CRN 97-88-1 CMF C8 H14 O2

L95 ANSWER 13 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:653264 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 139:197934

TITLE: Manufacture of powdered binders for fibers
INVENTOR(S): Weiler, Peter; Dietrich, Ulf; Graewe, Rene
PATENT ASSIGNEE(S): Wacker Polymer Systems GmbH & Co. KG, Germany

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

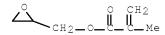
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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    EP 1336623
                        A2
                               20030820
                                          EP 2003-2092
                                                                  20030130 <--
    EP 1336623
                         А3
                               20031029
    EP 1336623
                         В1
                               20040825
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    DE 10206126
                        A1 20030904 DE 2002-10206126
                                                                  20020214 <--
                         A1
    US 20030155681
                               20030821
                                           US 2003-351200
                                                                  20030123 <--
    AT 274528
                         Τ
                               20040915
                                           AT 2003-2092
                                                                  20030130 <--
    ES 2224081
                         Т3
                               20050301
                                           ES 2003-2092
                                                                  20030130 <--
PRIORITY APPLN. INFO.:
                                           DE 2002-10206126
                                                             A 20020214 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The title binders, useful for bonding particulate materials and fibers with
     improved distribution in substrates and adhesion to particles and fibers,
     contain additives for lowering viscosity of the binder melt. The binder
     compns. comprise (A) copolymer powders with Tg or melting temperature >30^{\circ}
     obtained from (a1) carboxylic acid vinyl esters, (meth)acrylate esters,
     dienes, olefins, vinyl aromatic monomers, and vinyl halides, and (a2) other
     monomers, (B) powdered compds. containing \geq 2 functional groups reactive with
     copolymers A, and (C) powdered additives having Tg or melting temperature
     <150°, selected from polyesters, polyamides, poly(vinyl alc.), fatty alcs.,
     fatty acids and esters, paraffins, etc. For example, adhesion to cotton
     fibers of a powder comprising acrylamide-Bu acrylate-methacrylic acid-styrene
     emulsion copolymer binder (preparation given) with 10% triglycidyl
     isocyanurate crosslinker, 10% poly(vinyl alc.) (hydrolysis degree 64%) and
     0.6% Ph3PEtBr was 99%, vs. 75% for a similar binder without poly(vinyl alc.).
IC
    ICM C08F002-44
    ICS C08J003-12; C09D005-03; C08J005-04
CC
    35-4 (Chemistry of Synthetic High Polymers)
    Section cross-reference(s): 40
ΙT
    Binders
        (manufacture of powdered binders for fibers)
ΙT
    2451-62-9, Triglycidylisocyanurate
    RL: TEM (Technical or engineered material use); USES (Uses)
        (crosslinker; manufacture of powdered binders for fibers)
    38637-59-1P
                 50658-98-5P
                               56867-98-2P,
ΙT
    1,4-Cyclohexanedimethanol-Phthalic anhydride copolymer
    582217-42-3P
    RL: IMF (Industrial manufacture); TEM (Technical or engineered material
    use); PREP (Preparation); USES (Uses)
        (manufacture of powdered binders for fibers)
    38637-59-1P 50658-98-5P
                               582217-42-3P
ΙT
    RL: IMF (Industrial manufacture); TEM (Technical or engineered material
    use); PREP (Preparation); USES (Uses)
        (manufacture of powdered binders for fibers)
RN
    38637-59-1 CAPLUS
    2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
    ethenylbenzene and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)
    CM
         1
    CRN 141-32-2
    CMF C7 H12 O2
```

CRN 106-91-2 CMF C7 H10 O3



CM 3

CRN 100-42-5 CMF C8 H8

 $H 2 C \longrightarrow C H \longrightarrow P h$

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 50658-98-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenamide (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8 H 2 C ___ C H __ P h

CM 3

CRN 79-41-4 CMF C4 H6 O2

CM 4

CRN 79-06-1 CMF C3 H5 N O

RN 582217-42-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid, 2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 15214-89-8 CMF C7 H13 N O4 S

CM 2

CRN 141-32-2 CMF C7 H12 O2

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 4

CRN 79-41-4 CMF C4 H6 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

CM 6

CRN 79-06-1 CMF C3 H5 N O

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 14 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2003:317703 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 138:324070

TITLE: Electrode binder and electrode for electrochemistry

device

INVENTOR(S): Ueno, Yoshiyuki; Murahashi, Tomoyuki; Yamada,

Katsunori

PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003123766	A	20030425	JP 2001-321332	20011019 <
PRIORITY APPLN. INFO.:			JP 2001-321332	20011019 <

- AB The binder is an aqueous dispersion containing a vinyl copolymer, having structure units derived from a F containing monomer, and water dispersible vinyl copolymer. The binder may also contain a water soluble polymer. Electrodes, prepared from electrode material dispersions containing the binder, are used for primary and secondary batteries and double layer capacitors.
- IC ICM H01M004-62
 - ICS C08L057-08; C08L101-14; H01G009-04; H01G009-042; H01G009-058; H01M004-02; H01M004-24; H01M004-58; H01M004-60; H01M006-16; H01M010-40
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 76
- ST battery electrode binder vinyl copolymer compn; double layer capacitor electrode binder vinyl copolymer
- IT Battery electrodes

(binders containing water dispersible vinyl copolymers and fluoro containing

vinyl copolymers for battery electrodes)

IT Capacitors

(double layer; binders containing water dispersible vinyl copolymers and fluoro containing vinyl copolymers for double layer capacitor electrodes)

IT 7440-44-0, Carbon, uses

RL: DEV (Device component use); USES (Uses)

(activated; binders containing water dispersible vinyl copolymers and fluoro containing vinyl copolymers for double layer capacitor electrodes)

IT 9004-67-5P, Methyl cellulose 421766-50-9P 421766-51-0P 421766-53-2P 512206-56-3P 512206-57-4P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(binders containing water dispersible vinyl copolymers and fluoro containing $\ensuremath{\mathsf{containing}}$

vinyl copolymers for battery and capacitor electrodes)

IT 421766-51-0P 421766-53-2P 512206-56-3P

512206-57-4P

RL: DEV (Device component use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(binders containing water dispersible vinyl copolymers and fluoro containing

vinyl copolymers for battery and capacitor electrodes)

- RN 421766-51-0 CAPLUS
- CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, methyl 2-methyl-2-propenoate and pentacosafluorododecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 421766-49-6 CMF C16 H5 F25 O2

CRN 106-99-0 CMF C4 H6

 $H 2 C \longrightarrow C H \longrightarrow C H \longrightarrow C H 2$

CM 3

CRN 100-42-5 CMF C8 H8

H 2 C ---- C H --- P h

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

RN 421766-53-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 97-88-1 CMF C8 H14 O2

$$\begin{array}{ccc} & \circ & \mathrm{CH_2} \\ \mathbf{n} - \mathrm{Bu} \circ - \mathrm{C} - \mathrm{C} - \mathrm{Me} \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

RN 512206-56-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, heptadecafluorooctyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15498-46-1 CMF C12 H5 F17 O2

CRN 106-99-0 CMF C4 H6

H 2 C — C H — C H — C H 2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH \longrightarrow Ph$

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

RN 512206-57-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 115-23-1

CMF C8 H5 F9 O2

CM 2

CRN 106-99-0 CMF C4 H6

H 2 C — C H — C H — C H 2

CM 3

CRN 100-42-5 CMF C8 H8

H 2 C ____ C H __ P h

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-41-4 CMF C4 H6 O2

ACCESSION NUMBER:

DOCUMENT NUMBER:

L95 ANSWER 15 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN 2003:239912 CAPLUS Full-text

138:256637

TITLE:

Water-thinned paints with good film-forming property

and low tackiness containing core-shell binder

emulsions

INVENTOR(S): Amano, Ryotaro

PATENT ASSIGNEE(S): S.K. Kaken Co., Ltd., Japan Jpn. Kokai Tokkyo Koho, 8 pp. SOURCE:

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

J J PRIORI AB :	TY APPLN. INFO.:	A 2	.0030328 .0080116		20020628 <
AB Ξ			011000.		
ι	m1 ' ' '			JP 2001-207288 A	20010709 <
a h c r r r	unsatd. monomers of (B) water-dispersion a temperature high homopolymers. Compother. Thus, N-is methylenebisacrylate-2-eth core-shell graft of	containing ble resin er than the conents A a copropylac mide were aylhexyl accopolymer.	(a1) heat- particles he lower cr and B may r rylamide (r copolymd. crylate-acr A paint f	repared by copolymn. of sensitive monomers in to containing ethylenic unstitical solution temperature groups crosslinkable momopolymer Tc 32°) and at 70° in the presence cylic acid copolymer emulations the copolymer showed a waterproof tack-fired copolymer tack-fired copolymer and the copolymer showed a waterproof tack-fired copolymer tack-fir	the presence of meatd. monomers ature (Tc) of A le with each N,N'- of Me alsion to give a led the lowest
	CS C08F002-44; C	•		•	
	12-7 (Coatings, In Binders	ks, and Re	elated Prod	ucts)	
	(core-shell gra good film-formi	ng propert	y containi	water-thinned waterproo ng core-shell binder em	ulsions)
	5138-18-1DP, Sulfo	succinic a		s., graft polymer with	
	502697-46-3P 502				
	502697-49-6P 502				
)UZ69/-49-6P 30%		0040210	der lande	

ammonium salt

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell; water-thinned waterproof paints with good film-forming property containing core-shell binder emulsions)

```
ΙT
    502697-44-1P 502697-45-2P
                                502697-46-3P
    502697-47-4P
                  502697-48-5P
                                 502697-50-9P
    502697-52-1P
                  502697-53-2P
                                 502697-54-3P
```

502699-00-5P, Acrylic acid-ethylene oxide-2-ethylhexyl

acrylate-N-isopropylacrylamide-methyl methacrylate graft copolymer sulfate ammonium salt

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(core-shell; water-thinned waterproof paints with good film-forming property containing core-shell binder emulsions)

RN 502697-44-1 CAPLUS

2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl CN 2-propenoate, N, N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CRN 2210-25-5 CMF C6 H11 N O

$$i-PrNH$$
 C CH CH CH 2

CM 2

CRN 110-26-9 CMF C7 H10 N2 O2

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 502697-45-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, 2-propenoic acid and α -sulfo- α -[4-nonyl-2-(1-propenyl)phenoxy]poly(oxy-1,2-ethanediyl) ammonium salt, graft (9CI) (CA INDEX NAME)

CM 1

CRN 140651-97-4

CMF (C2 H4 O)n C18 H28 O4 S . H3 N

CCI PMS

$$\begin{array}{c|c} \text{HO}_3\text{S} & \begin{array}{c} \text{(CH}_2)_8 \text{-Me} \\ \\ \text{Me-CH-CH} \end{array} \end{array}$$

● ИНЗ

CM 2

CRN 2210-25-5 CMF C6 H11 N O

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

CRN 79-10-7 CMF C3 H4 O2

RN 502697-46-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, Latemul S 180A, N-(1-methylethyl)-2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 113255-53-1 CMF Unspecified

CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 2210-25-5 CMF C6 H11 N O

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 80-62-6

CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 502697-47-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, α -[4-nonyl-2-(1-propenyl)phenyl]- ω -hydroxypoly(oxy-1,2-ethanediyl), 2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 146847-27-0

CMF (C2 H4 O)n C18 H28 O

CCI PMS

CM 2

CRN 2210-25-5 CMF C6 H11 N O

CM 3

CRN 141-32-2

CMF C7 H12 O2

CM 4

CRN 110-26-9 CMF C7 H10 N2 O2

CM 5

CRN 103-11-7 CMF C11 H20 O2

CM 6

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-10-7 CMF C3 H4 O2

CRN 79-06-1 CMF C3 H5 N O

$$H_2N$$
— C — CH — CH_2

RN 502697-48-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide, oxirane, 2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2210-25-5 CMF C6 H11 N O

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 110-26-9 CMF C7 H10 N2 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

CM 7

CRN 79-06-1 CMF C3 H5 N O

CM 8

CRN 75-21-8 CMF C2 H4 O



RN 502697-50-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, N,N'-methylenebis[2-propenamide], N-(1-methylethyl)-2-propenamide and 2-propenoic acid, graft (9CI) (CA

INDEX NAME)

CM 1

CRN 2210-25-5 CMF C6 H11 N O

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 110-26-9 CMF C7 H10 N2 O2

$${\tt H_2C} = {\tt CH} = {\overset{\circ}{\mathsf{L}}} {\tt CH} = {\tt CH} = {\tt CH}_2 = {\tt NH} = {\overset{\circ}{\mathsf{L}}} {\tt CH} = {\tt CH}_2$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

$$\begin{array}{c} \begin{array}{c} \\ \text{CH}_2 - \text{O} - \text{C} - \text{CH} = \text{CH}_2 \end{array} \\ \text{Et} - \text{CH} - \text{Bu-n} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 502697-52-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2210-25-5 CMF C6 H11 N O

CM 2

CRN 106-91-2 CMF C7 H10 O3

CM 3

CRN 103-11-7 CMF C11 H20 O2

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 502697-53-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 2873-97-4 CMF C9 H15 N O2

CM 2

CRN 2210-25-5 CMF C6 H11 N O

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} {}^{\text{H}_2\text{C}} \circ \\ \parallel & \parallel \\ {}^{\text{Me}} - \circ - \circ {}^{\text{C}} - \circ {}^{\text{Me}} \end{array}$$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 502697-54-3 CAPLUS

CN Hexanedioic acid, dihydrazide, polymer with N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2873-97-4 CMF C9 H15 N O2

CM 2

CRN 2210-25-5 CMF C6 H11 N O

CM 3

CRN 1071-93-8 CMF C6 H14 N4 O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

RN 502699-00-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethylhexyl 2-propenoate, N-(1-methylethyl)-2-propenamide, oxirane and 2-propenoic acid, hydrogen sulfate (ester), graft, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 7664-93-9 CMF H2 O4 S

CM 2

CRN 502698-99-9

CMF (C11 H20 O2 . C6 H11 N O . C5 H8 O2 . C3 H4 O2 . C2 H4 O) x

CCI PMS

CM 3

CRN 2210-25-5 CMF C6 H11 N O

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5



CRN 79-10-7 CMF C3 H4 O2

HO_C_CH__CH2

CM 7

CRN 75-21-8 CMF C2 H4 O



L95 ANSWER 16 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:736834 CAPLUS Full-text

DOCUMENT NUMBER: 137:256414

TITLE: Sheet to form a protective film for chips and process

for producing semiconductor chips

INVENTOR(S): Senoo, Hideo; Sugino, Takashi; Yamazaki, Osamu

PATENT ASSIGNEE(S): Lintec Corporation, Japan SOURCE: U.S. Pat. Appl. Publ., 17 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	DATE APPLICATION NO.					
US 20020137309	A1	20020926	US 2002-102583	20020320 <				
US 6919262	B2	20050719						
MX 2002003032	A	20030820	MX 2002-3032	20001211 <				
JP 2002280329	A	20020927	JP 2001-81226	20010321 <				
JP 3544362	B2	20040721						
TW 533532	В	20030521	TW 2002-91105261	20020320 <				
CN 1375866	A	20021023	CN 2002-107957	20020321 <				
CN 1217406	С	20050831						
CN 1684225	A	20051019	CN 2005-10060155	20020321 <				
CN 100370581	С	20080220						
EP 1852906	A2	20071107	EP 2007-16260	20020321 <				
EP 1852906	A3	20090401						
R: AT, BE, CH	, CY, DE	E, DK, ES, E	FI, FR, GB, GR, IE, IT,	LI, LU, MC,				

```
NL, PT, SE, TR
    EP 1244143
                       В1
                              20080220 EP 2002-252032
                                                               20020321 <--
        R: DE, FR, GB, IT, NL, PT
    PT 1244143
                       E
                              20080311
                                         PT 2002-252032
                                                               20020321 <--
                                         JP 2004-54354
    JP 2004260190
                        Α
                              20040916
                                                               20040227 <--
    JP 4271597
                        В2
                              20090603
    US 20050184402
                       A1
                             20050825
                                         US 2005-113480
                                                               20050425 <--
    US 7408259
                       B2
                             20080805
    US 20050186762
                            20050825
                                        US 2005-113481
                                                               20050425 <--
                       A1
    US 7235465
                       B2 20070626
    PH 1200600121
                       Α
                            20070910
                                        PH 2006-1200600121
                                                               20060227 <--
                                         PH 2006-1200600122
                                                               20060227 <--
    PH 1200600122
                        Α
                            20070910
                              20080327
                                         JP 2007-227579
    JP 2008072108
                        Α
                                                               20070903
                       A1
                                         US 2008-144702 20080624 <--
JP 2001-81226 A 20010321 <--
    US 20080260982
                              20081023
PRIORITY APPLN. INFO.:
                                         PH 2002-1200200207 A3 20020320 <--
                                         US 2002-102583 A3 20020320 <--
                                         CN 2002-107957
                                                           A3 20020321 <--
                                         EP 2002-252032
                                                            A3 20020321 <--
                                         JP 2004-54354
                                                            A3 20040227
                                         US 2005-113480
                                                            A3 20050425
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention provides a sheet to form a protective film for chips, which can be readily formed into a highly uniform protective film on a back surface of chip, and which, even if minute scratches are formed on the back surface of chip as a result of mech. grinding, can eliminate adverse effects resulting from the scratches. The sheet to form a protective film for chips of the present invention comprises a release sheet and a protective film forming layer formed on a detachable surface of the release sheet, wherein said protective film forming layer comprises a thermosetting or energy ray-curable component and a binder polymer component.

IC ICM H01L021-301

INCL 438460000

CC 76-3 (Electric Phenomena)

Section cross-reference(s): 38

IT Binders

Coating materials

Crosslinking agents

Electric circuits

Polymerization

Semiconductor device fabrication

(sheet to form protective film for chips and process for producing semiconductor chips)

IT 39278-79-0, Coronate L

RL: CPS (Chemical process); NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(crosslinking agent; sheet to form protective film for chips and process for producing semiconductor chips)

IT 183803-65-8P, Butyl acrylate-methyl methacrylate-methyl

acrylate-2-hydroxyethyl acrylate copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses) (sheet to form protective film for chips and process for producing semiconductor chips)

IT 171874-02-5, Butyl acrylate-methyl methacrylate-glycidyl
 methacrylate-2-hydroxyethyl acrylate copolymer
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
 (Physical process); TEM (Technical or engineered material use); PROC
 (Process); USES (Uses)

(sheet to form protective film for chips and process for producing semiconductor chips)

IT 183803-65-8P, Butyl acrylate-methyl methacrylate-methyl acrylate-2-hydroxyethyl acrylate copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses) (sheet to form protective film for chips and process for producing semiconductor chips)

RN 183803-65-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate and methyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 96-33-3 CMF C4 H6 O2

CM 4

IT 171874-02-5, Butyl acrylate-methyl methacrylate-glycidyl methacrylate-2-hydroxyethyl acrylate copolymer

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(sheet to form protective film for chips and process for producing semiconductor chips)

RN 171874-02-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} = 0 \quad \overset{\circ}{\longleftarrow}_{\text{C}} \quad \overset{\text{CH}_2}{\longleftarrow}_{\text{Me}}$$

CM 4



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 17 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:368812 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 136:357524

TITLE: Binder for electrochemical device electrode and the

electrode

INVENTOR(S): Ueno, Yoshiyuki; Murahashi, Satoshi; Yamada, Katsufumi

PATENT ASSIGNEE(S): Sanyo Chemical Industries Ltd., Japan

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

I	PATENT NO.						D	DATE		AP	APPLICATION NO.					DATE				
7	 WO	2002039524			A1 2002			0516	WC	2001	2	112	<							
		W:	CN,	IN,	KR,	US														
		RW:	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI, F	R, GB	, GR,	IE,	ΙΤ,	LU,	MC,	ΝL,			
			PT,	SE,	TR															
Ċ	JΡ	2002	2561	29		Α		2002	0911	JP	2001	-3246	28		2	0011	023	<		
Ċ	JΡ	3911	145			В2		2007	0509											
Ţ	IJS	2004	0062	989		A1		2004	0401	US	2003	-4158	90		2	0030	911	<		
PRIOR	IΤΣ	APP:	LN.	INFO	.:					JP	2000	-3431	33		A 2	0001	110	<		
										JP	2000	-3944	67		A 2	0001	226	<		
										WC	2001	-JP98	63	1	W 2	0011	112	<		

- The binder is an aqueous dispersion containing a F containing water dispersible polymer and/or a vinyl polymer thickener, which can reversibly change between hydrophilic and hydrophobic at a transition temperature. The binder may also contain other water dispersible polymer. The dispersion is preferably prepared by using a polymerizable emulsifier CH2:CR1COO(AO)pAr(R2)mXAr(R3)nO(AO)qSO3M, where Ar = aromatic group, R1 = H or Me, R2 and R3 = monovalent hydrocarbon groups with >1 R2 and >1 R3 being an aromatic ring containing hydrocarbon groups, m and n = 0 or 1-5 with an average (m+n) = 1-8, X = alkylene, cycloalkylidene, aryalkylidene, O, S, sulfonyl, bistrifluoromethyl methylene, or carbonyl group, M = cation, A = C2-4 alkylene group, p, and q = 1-40 with average (p+q) = 2-80. The electrode is useful for primary and secondary batteries as well as for double layer capacitors.
- IC ICM H01M004-62
 - ICS H01M004-02; H01M004-04; H01G009-058
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 76
- ST battery electrode binder water dispersing polymer thickener; double layer capacitor electrode water dispersing binder
- IT Battery electrodes
 - (compns. of aqueous dispersions of electrode binders for secondary lithium batteries)
- IT Capacitors
 - (double layer; compns. of aqueous dispersions of

electrode binders for double layer capacitors) ΙT 7440-44-0D, Carbon, activated RL: DEV (Device component use); USES (Uses) (compns. of aqueous dispersions of electrode binders for double layer capacitors) 9003-39-8 9004-67-5, Methyl cellulose 28262-63-7 28572-98-7 29186-31-0 56793-67-0 ΙT 421766-50-9 421766-51-0 421766-52-1 421766-53-2 421766-54-3 421766-55-4 RL: DEV (Device component use); USES (Uses) (compns. of aqueous dispersions of electrode binders for electrochem. devices) 28262-63-7 28572-98-7 29186-31-0 ΙT 56793-67-0 421766-51-0 421766-52-1 421766-53-2 421766-54-3 421766-55-4 RL: DEV (Device component use); USES (Uses) (compns. of aqueous dispersions of electrode binders for electrochem. devices) 28262-63-7 CAPLUS RN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate and CN methyl 2-methyl-2-propenoate (CA INDEX NAME) CM 1 CRN 97-88-1 CMF C8 H14 O2 O CH2 n-BuO_C_C_Me CM CRN 80-62-6 CMF C5 H8 O2 H2C O _Щ_Ц CM 3 CRN 79-41-4 CMF C4 H6 O2 CH2 Me-C-CO2H

2-Propenoic acid, 2-methyl-, polymer with ethyl 2-methyl-2-propenoate (CA

28572-98-7 CAPLUS

RN

CN

INDEX NAME)

CM 1

CRN 97-63-2 CMF C6 H10 O2

CM 2

CRN 79-41-4 CMF C4 H6 O2

RN 29186-31-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 106-99-0 CMF C4 H6

H 2 C — C H — C H — C H 2

CM 2

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM 3

$$\begin{array}{c} {}^{\text{H}_2\text{C}} \\ {}^{\text{M}_2\text{C}} \\ {}^{\text{C}} - {}^{\text{C}} \\ {}^{\text{C}} - {}^{\text{OMe}} \end{array}$$

CRN 79-41-4 CMF C4 H6 O2

RN 56793-67-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene and methyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 100-42-5 CMF C8 H8

CM 2

CRN 97-88-1 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4

CMF C4 H6 O2

RN 421766-51-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 1,3-butadiene, ethenylbenzene, methyl 2-methyl-2-propenoate and pentacosafluorododecyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 421766-49-6 CMF C16 H5 F25 O2

$$\begin{array}{c} & & & & \\ \text{F3C---} & (\text{CF2})_{11} - \text{O} - \overset{\circ}{\text{C}} - \overset{\text{CH2}}{\text{C}} \\ & & & \\ \end{array}$$

CM 2

CRN 106-99-0 CMF C4 H6

$$H \supseteq C \longrightarrow C H \longrightarrow C H \longrightarrow C H \supseteq$$

CM 3

CRN 100-42-5 CMF C8 H8

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 421766-52-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, heptadecafluorooctyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15498-46-1 CMF C12 H5 F17 O2

CM 2

CRN 100-42-5 CMF C8 H8

$$H_2C \longrightarrow CH - Ph$$

CM 3

CRN 97-88-1 CMF C8 H14 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 421766-53-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 115-23-1 CMF C8 H5 F9 O2

CM 2

CRN 97-88-1 CMF C8 H14 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

RN 421766-54-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and nonafluorobutyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 115-23-1 CMF C8 H5 F9 O2

CM 2

CRN 100-42-5 CMF C8 H8

CM 3

CRN 97-88-1 CMF C8 H14 O2

CM 4

RN 421766-55-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-methyl-2-propenoate, ethenylbenzene, methyl 2-methyl-2-propenoate and octyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2157-01-9 CMF C12 H22 O2

CRN 79-41-4 CMF C4 H6 O2

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(5 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 18 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2002:292220 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 136:318006

TITLE: Methacrylate polymer dielectric thin films, thin film

capacitors and preparation method thereof

INVENTOR(S): Sasaki, Yorihiko; Sasaki, Makoto PATENT ASSIGNEE(S): Alps Electric Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002118030	A	20020419	JP 2000-308372	20001006 <
PRIORITY APPLN. INFO.:			JP 2000-308372	20001006 <

- AB Title films mainly comprise crosslinkable polymers obtained from alkyl methacrylates and glycidyl methacrylate. Temperature dependency of the dielec. consts. of the films are controlled by copolymn. ratios of the monomers providing temp-compensated capacitors over a wide range. Thus, a composition containing 20 g crosslinkable 19:1 (mol) Me methacrylate-glycidyl methacrylate copolymer and 2 g naphthoquinonediazido was spin-coated on a lower electrode, irradiated with a UV light using a photomask, developed to give a pattern, cured at 230° for 1 h, and an upper electrode was formed to give a dielec. thin film capacitor with thermal expansion coefficient 2.1 + 10-4/° and temperature dependency of the dielec. constant -1800 ppm/°.
- IC ICM H01G004-33

ICS C08F008-12; C08F220-12; C08F220-32; H01G004-18; H01G004-30

- CC 76-10 (Electric Phenomena)
 Section cross-reference(s): 38
- IT Capacitors

(film; preparation of dielec. thin films and thin film capacitors)

IT Capacitor electrodes

Dielectric films

(preparation of dielec. thin films and thin film capacitors)

IT 29931-28-0P, Glycidyl acrylate-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked; preparation of dielec. thin films and thin film capacitors)

IT 29931-28-0P, Glycidyl acrylate-methyl methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

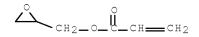
(crosslinked; preparation of dielec. thin films and thin film capacitors)

RN 29931-28-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-oxiranylmethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 106-90-1 CMF C6 H8 O3



CM 2

CRN 80-62-6 CMF C5 H8 O2

L95 ANSWER 19 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2001:709762 CAPLUS Full-text

DOCUMENT NUMBER: 135:257734

TITLE: Crosslinkable polymer blends

INVENTOR(S): Kohlhammer, Klaus; Hashemzadeh, Abdulmajid

PATENT ASSIGNEE(S): Wacker Polymer Systems G.m.b.H. & Co. K.-G., Germany

SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. K					KIND DATE			AP	DATE							
EP 113				A1 B1	_	2001		EP	2001	 -1035	70		20	0102	220	<
	AT,			DE,		ES,	0 - 0 0	GB, G	R, IT	, LI,	LU,	NL,	SE,	MC,	PT,	
DE 100	14399	,	,	LV, A1	,	2001	1004	DE	2000	-1001	4399		20	00003	323	<

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20010220 <--
    AT 286521
                               20050115
                                          AT 2001-103570
    ES 2233506
                         Т3
                               20050616
                                          ES 2001-103570
                                                                  20010220 <--
    US 20010034399
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                               20011025
                                          US 2001-804495
                                                                  20010312 <--
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                         В2
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                               20100209
    JP 2001261986
                         Α
                              20010926
                                          JP 2001-81490
                                                                  20010321 <--
                         B2 20070919
    JP 3977602
    TW 574272
                         В
                               20040201
                                          TW 2001-90106816
                                                                  20010322 <--
PRIORITY APPLN. INFO.:
                                           DE 2000-10014399 A 20000323 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The title compns., useful as binders (e.g., for lamination and bonding of
     textiles), are aqueous dispersions or powders of polymers (glass temperature
     or m.p. \geq 30^{\circ}) from vinyl esters, (meth)acrylate esters, (di)olefins, vinyl
     aromatic compds., and/or vinyl halides and 0.1-50% unsatd. carboxylic acids;
     and copolymers from the above monomers with unsatd. functional compds. other
     than carboxylic acids in place of the acids. A 1:1 mixture of aqueous
     dispersions of 13.8:403.7:67.3:861.3 acrylamide-Bu acrylate-methacrylic acid-
     styrene copolymer and 99.8:298.7:647.2 Bu acrylate-glycidyl methacrylate-
     styrene copolymer was spray-dried to give a powder with particle size
     .apprx.25 μm, glass temperature 49°, DSC exotherm peak 182°, and gel time 20 s
     at 210°. Use of the products as binders for fiber moldings is exemplified.
IC
    ICM C08G081-02
    ICS C08J003-24; D06M023-08
    36-6 (Physical Properties of Synthetic High Polymers)
    Section cross-reference(s): 40
    blend polymer crosslinkable binder; fiber binder polymer blend;
ST
    reinforced plastic binder polymer blend; acrylate copolymer blend
    crosslinkable; methacrylic acid copolymer blend; glycidyl
    methacrylate copolymer blend; styrene copolymer blend
    crosslinkable
    Polyamide fibers, miscellaneous
ΙT
    RL: MSC (Miscellaneous)
        (aramid; crosslinkable polymer blends as binders for aramid
       fabrics)
    Alkadienes
ΤТ
    Alkenes, uses
    RL: POF (Polymer in formulation); TEM (Technical or engineered material
    use); USES (Uses)
        (copolymers; crosslinkable polymer blends)
ΙT
    Textiles
        (cotton; crosslinkable polymer blends as binders for cotton
       fabrics)
ΙT
    Binders
        (crosslinkable polymer blends as binders)
    Carbon fibers, miscellaneous
ΙT
    RL: MSC (Miscellaneous)
        (crosslinkable polymer blends as binders for carbon fibers)
ΙT
    Glass fibers, miscellaneous
    RL: MSC (Miscellaneous)
        (crosslinkable polymer blends as binders for glass fibers)
ΙT
    Carboxylic acids, uses
    RL: POF (Polymer in formulation); TEM (Technical or engineered material
    use); USES (Uses)
        (dicarboxylic, unsatd., copolymers; crosslinkable polymer
       blends)
ΙT
    Reinforced plastics
    RL: MSC (Miscellaneous)
```

(fiber-reinforced; crosslinkable polymer blends as binders

for reinforced plastics)

IT Vinyl compounds, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(halo, copolymers; crosslinkable polymer blends)

IT Carboxylic acids, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(unsatd., copolymers; crosslinkable polymer blends)

IT Aromatic compounds

Vinyl compounds, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(vinyl arenes, copolymers; crosslinkable polymer blends)

IT Esters, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(vinyl, copolymers; crosslinkable polymer blends)

IT 26428-43-3, Butyl acrylate-glycidyl methacrylate-styrene copolymer 50658-98-5, Acrylamide-butyl acrylate-methacrylic acid-styrene copolymer 51601-25-3, Butyl acrylate-methacrylic acid-N-methylolacrylamide-styrene copolymer RL: POF (Polymer in formulation); TEM (Technical or engineered material

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(crosslinkable polymer blends)

IT 26428-43-3, Butyl acrylate-glycidyl methacrylate-styrene copolymer 50658-98-5, Acrylamide-butyl acrylate-methacrylic acid-styrene copolymer 51601-25-3, Butyl acrylate-methacrylic acid-N-methylolacrylamide-styrene copolymer RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(crosslinkable polymer blends)

RN 26428-43-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

CRN 100-42-5 CMF C8 H8

RN 50658-98-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenamide (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8

CM 3

CRN 79-41-4 CMF C4 H6 O2

CM 4

CRN 79-06-1 CMF C3 H5 N O

RN 51601-25-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-propenamide (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

$$H_2C \longrightarrow CH - Ph$$

CM 4

CRN 79-41-4 CMF C4 H6 O2

- OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
- REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 20 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:865385 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 134:44479

TITLE: Acrylic resins for nonaqueous-solvent binder

compositions, electrodes, and secondary batteries and

manufacture of electrodes

INVENTOR(S): Ito, Toshihiko; Tanaka, Masaru; Hirayama, Takao;

Nishimura, Noboru

PATENT ASSIGNEE(S): Hitachi Chemical Co., Ltd., Japan; Hitachi, Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000344838	A	20001212	JP 1999-154043	19990601 <
PRIORITY APPLN. INFO.:			JP 1999-154043	19990601 <

- The title acrylic resins comprise (A) epoxy group-containing (meth)acrylate and (B) nitrile group-containing (meth)acrylate and have glass transition temperature -30 to 25°. The title binder compns. comprise the acrylic resins dissolved or dispersed in nonaq. solvents. Optionally, the compns. comprise epoxy resins and hardening accelerators. The electrodes are manufactured by mixing the binder compns. with active mass, coating them on supports, and then removing nonaq. solvents. Preferably, the active mass is LixMnyO2 (x = 0.2-2.5; y = 0.8-1.25). Resulting electrodes are also claimed. Secondary batteries equipped with anodes and/or cathodes manufactured by above method are also claimed. The acrylic resins have good adhesion, bendability, and electrolyte resistance and resulting batteries show long cycle life, high volume energy d., and safety.
- IC ICM C08F220-32
 - ICS C08F220-42; C08K003-22; C08L033-14; C08L033-18; C08L063-00; H01M004-02; H01M004-04; H01M004-58; H01M004-62; H01M010-40
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 38
- IT Battery anodes
 - Battery cathodes

Battery electrodes

Binders

Safety

(epoxy- and nitrile-containing acrylic resins for nonaq.-solvent binder compns. in electrodes of secondary batteries) $\frac{1}{2}$

IT 27274-54-0P, Acrylonitrile-butyl acrylate-glycidyl methacrylate copolymer 29437-34-1P, Acrylonitrile-butyl acrylate-ethyl acrylate copolymer 41259-37-4P, Butyl acrylate-ethyl acrylate-glycidyl methacrylate copolymer 58152-79-7P, Acrylonitrile-butyl acrylate-ethyl acrylate-glycidyl methacrylate copolymer 292145-57-4P, Acrylonitrile-butyl acrylate-2-ethylhexyl

acrylate-glycidyl methacrylate copolymer

RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(epoxy- and nitrile-containing acrylic resins for nonaq.-solvent binder compns. in electrodes of secondary batteries)

IT 27274-54-0P, Acrylonitrile-butyl acrylate-glycidyl methacrylate copolymer 41259-37-4P, Butyl acrylate-ethyl acrylate-glycidyl methacrylate copolymer 58152-79-7P, Acrylonitrile-butyl

acrylate-ethyl acrylate-glycidyl methacrylate copolymer 292145-57-4P, Acrylonitrile-butyl acrylate-2-ethylhexyl acrylate-glycidyl methacrylate copolymer RL: DEV (Device component use); PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (epoxy- and nitrile-containing acrylic resins for nonaq.-solvent binder compns. in electrodes of secondary batteries) 27274-54-0 CAPLUS RN CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and 2-propenenitrile (CA INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 CM 2 CRN 107-13-1 CMF C3 H3 N $H \ge C \longrightarrow C H \longrightarrow C \longrightarrow N$ CM 3 CRN 106-91-2 CMF C7 H10 O3 41259-37-4 CAPLUS RN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate (CA INDEX NAME)

CM

1

CRN 141-32-2 CMF C7 H12 O2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

RN 58152-79-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate, ethyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

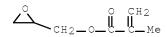
CM 3

CRN 107-13-1 CMF C3 H3 N

 $H \supseteq C \longrightarrow C H \longrightarrow C \longrightarrow N$

CM 4

CRN 106-91-2 CMF C7 H10 O3



RN 292145-57-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl 2-propenoate, 2-ethylhexyl 2-propenoate and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

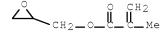


CM 2

CRN 107-13-1 CMF C3 H3 N

CM 3

CRN 106-91-2 CMF C7 H10 O3



CRN 103-11-7 CMF C11 H20 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 21 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:741036 CAPLUS Full-text

DOCUMENT NUMBER: 133:310310

TITLE: Process of preparing curable compositions and

radiation curable compositions

INVENTOR(S): Greenblatt, Garry David; Lange, Barry Clifford; Bowe, Michael Damian; Merritt, Richard Foster; Wilczynski, Robert; Whitman, David William; Brown, Ward Thomas;

Beckley, Ronald Scott; Wolfersberger, Martha Harbaugh

PATENT ASSIGNEE(S): Rohm and Haas Co., USA SOURCE: Eur. Pat. Appl., 22 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 9

PATENT INFORMATION:

F	PATENT NO.				KIND DATE			AP:	PLICAT	ION NO	Ο.	DATE					
_	EP 1 EP 1					A1 B1	_	2000		EP	2000-	302820)	_	20000	404	<
_			AT,	,	CH,	DE,				GB, G	R, IT,	LI, 1	LU, NL	, SI	E, MC,	PT,	
-	JS 6		098	ŕ	·	В1		2002		US	1999-	291425	5		19990	413	<
	AU 7		0137: 77	357		B2		2002 2004		AU	2001-	81566			20011	023	<
PRIORI	TY .	APP:	LN.	INFO	.:						1999- 1994-				19990 19940	_	
											1995- 1997-		-	B1 P	19950 19970		
										US	1998-	34924	-	B2	19980	305	<
											1998- 1998-				19980. 19980.		
											1998- 1998-	-			19980. 19981.		
A C C T C N	ידאיבוזאוז	T 11	TOTO) V E	OD 11	C D 7	יואינוים	ת דר יד	TT 7D	י ואד ייו					1001	<u></u>	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

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AΒ
     The title process comprises (a) forming an oligomer from oligomerization of a
     mixture of a monomer A having a functional group and a monomer B at a
     temperature 150-650^{\circ}, and pressure 3-35 MPa and the pressure is high enough to
     maintain the reaction mixture in a fluid state for a residence time 0.1~\mathrm{s} to 4~\mathrm{s}
     min, and (b) reacting a modifier having ≥1 reactive moiety with the oligomer,
     where the modifier further comprises a curable group, e.g. unsatn., which is
     maintained for later crosslinking. Thus, an oligomer of 38 mol% glycidyl
     methacrylate and 62 mol% Et acrylate was prepared and esterified using 40 g
     acrylic acid in the presence of Cr 2-ethylhexanoate and solvent and heated at
     90° for 6 h to give a curable oligomer.
IC
     ICM C08F008-00
     ICS C08C019-00
     35-8 (Chemistry of Synthetic High Polymers)
CC
     Section cross-reference(s): 37
ΙT
     Adhesives
       Binders
     Films
     Inks
     Paints
        (oligomer modification for radiation curable compns. for)
     Crosslinking
        (radiochem.; oligomer modification for radiation curable compns.)
ΤT
     302588-17-6P, Acrylic acid-butyl acrylate copolymer ester with
     glycidyl methacrylate 302588-18-7P, Butyl
     acrylate-2-hydroxyethyl acrylate copolymer acrylate-trimethylolpropane
     triacrylate copolymer
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (UV crosslinked; oligomer modification for radiation curable
        compns.)
     100091-35-8P, Butyl acrylate-glycidyl acrylate copolymer
ΙT
     acrylate 107634-49-1P, Butyl acrylate-glycidyl methacrylate
     copolymer acrylate 302588-15-4P, Butyl acrylate-4-hydroxybutyl
     acrylate copolymer acrylate 302588-16-5P, Butyl
     acrylate-2-hydroxyethyl acrylate copolymer acrylate
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (UV crosslinked; oligomer modification for radiation curable
        compns.)
     302588-13-2P, Ethyl acrylate-glycidyl methacrylate copolymer
ΙT
     acrylate
               302588-19-8P
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (oligomer modification for radiation curable compns.)
     25085-42-1P, Butyl acrylate-4-hydroxybutyl acrylate copolymer
ΤТ
     26660-36-6P, Butyl acrylate-glycidyl methacrylate copolymer
     32409-50-0P, Butyl acrylate-2-hydroxyethyl acrylate copolymer
     64171-34-2P, Butyl acrylate-glycidyl acrylate copolymer
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (oligomer; oligomer modification for radiation curable compns.)
     302588-17-6P, Acrylic acid-butyl acrylate copolymer ester with
ΙT
                             302588-18-7P, Butyl
     glycidyl methacrylate
     acrylate-2-hydroxyethyl acrylate copolymer acrylate-trimethylolpropane
     triacrylate copolymer
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (UV crosslinked; oligomer modification for radiation curable
        compns.)
     302588-17-6 CAPLUS
RN
     2-Propenoic acid, polymer with butyl 2-propenoate,
CN
     2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester (9CI) (CA INDEX
     NAME)
```

$$\begin{array}{c} \text{OH} \\ \text{HO_CH}_2 \\ \end{array} \\ \begin{array}{c} \text{OH} \\ \text{CH}_2 \\ \end{array} \\ \text{O} \\ \end{array} \\ \begin{array}{c} \text{CH}_2 \\ \\ \end{array} \\ \text{Me} \end{array}$$

CCI PMS

CM 3

CRN 141-32-2 CMF C7 H12 O2

RN 302588-18-7 CAPLUS

CN 2-Propenoic acid, 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl ester, polymer with butyl 2-propenoate polymer with 2-hydroxyethyl 2-propenoate 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 15625-89-5

CMF C15 H20 O6

```
CM
         2
    CRN 302588-16-5
    CMF
         (C7 H12 O2 . C5 H8 O3)x . x C3 H4 O2
         CM
              3
         CRN 79-10-7
         CMF C3 H4 O2
         CM
         CRN 32409-50-0
         CMF
              (C7 H12 O2 . C5 H8 O3)x
         CCI PMS
              CM
                   5
              CRN 818-61-1
              CMF C5 H8 O3
 HO-CH2-CH2-O-Ü-CH-CH2
              СМ
                   6
              CRN 141-32-2
              CMF C7 H12 O2
 n-Bu0-C-CH-CH2
ΙT
    100091-35-8P, Butyl acrylate-glycidyl acrylate copolymer
    acrylate 107634-49-1P, Butyl acrylate-glycidyl methacrylate
    copolymer acrylate 302588-15-4P, Butyl acrylate-4-hydroxybutyl
    acrylate copolymer acrylate 302588-16-5P, Butyl
    acrylate-2-hydroxyethyl acrylate copolymer acrylate
    RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
     (Reactant or reagent)
        (UV crosslinked; oligomer modification for radiation curable
       compns.)
    100091-35-8 CAPLUS
RN
```

2-Propenoic acid, butyl ester, polymer with oxiranylmethyl 2-propenoate, 2-propenoate (9CI) (CA INDEX NAME) CM 1 CRN 79-10-7 CMF C3 H4 O2 HO_C_CH__CH2 2 CM CRN 64171-34-2 CMF (C7 H12 O2 . C6 H8 O3) \times CCI PMS СМ 3 CRN 141-32-2 CMF C7 H12 O2 CM4 CRN 106-90-1 CMF C6 H8 O3 107634-49-1 CAPLUS RN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl 2-propenoate, 2-propenoate (9CI) (CA INDEX NAME) CM 1 CRN 79-10-7 CMF C3 H4 O2 но_С_сн_сн2

```
CM 2
    CRN 26660-36-6
         (C7 H12 O2 . C7 H10 O3)x
    CMF
    CCI PMS
         СМ
              3
         CRN 141-32-2
         CMF C7 H12 O2
         CM
         CRN 106-91-2
         CMF C7 H10 O3
    302588-15-4 CAPLUS
RN
    2-Propenoic acid, butyl ester, polymer with 4-hydroxybutyl 2-propenoate,
CN
    2-propenoate (9CI) (CA INDEX NAME)
    CM 1
    CRN 79-10-7
    CMF C3 H4 O2
но_С_сн__сн2
    CM
         2
    CRN 25085-42-1
    CMF (C7 H12 O3 . C7 H12 O2)\times
    CCI PMS
         CM
              3
         CRN 2478-10-6
         CMF C7 H12 O3
```

CRN 141-32-2 CMF C7 H12 O2

RN 302588-16-5 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-hydroxyethyl 2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 32409-50-0

CMF (C7 H12 O2 . C5 H8 O3) \times

CCI PMS

CM 3

CRN 818-61-1 CMF C5 H8 O3

CM 4

CRN 141-32-2 CMF C7 H12 O2

IT 302588-13-2P, Ethyl acrylate-glycidyl methacrylate copolymer acrylate 302588-19-8P
RL: IMF (Industrial manufacture); PREP (Preparation)
(oligomer modification for radiation curable compns.)

RN 302588-13-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with ethyl 2-propenoate, 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 79-10-7 CMF C3 H4 O2

CM 2

CRN 26591-04-8

CMF (C7 H10 O3 . C5 H8 O2) \times

CCI PMS

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 106-91-2 CMF C7 H10 O3

RN 302588-19-8 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 2-hydroxyethyl 2-propenoate, [2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl]carbamate (9CI) (CA INDEX NAME)

CRN 96571-20-9 CMF C7 H11 N O4

CM 2

CRN 28136-76-7

CMF (C5 H8 O3 . C5 H8 O2) \times

CCI PMS

CM 3

CRN 818-61-1 CMF C5 H8 O3

CM 4

CRN 140-88-5 CMF C5 H8 O2

IT 25085-42-1P, Butyl acrylate-4-hydroxybutyl acrylate copolymer 26660-36-6P, Butyl acrylate-glycidyl methacrylate copolymer 32409-50-0P, Butyl acrylate-2-hydroxyethyl acrylate copolymer

64171-34-2P, Butyl acrylate-glycidyl acrylate copolymer

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(oligomer; oligomer modification for radiation curable compns.)

RN 25085-42-1 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 4-hydroxybutyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CRN 141-32-2 CMF C7 H12 O2

RN 26660-36-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

RN 32409-50-0 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-hydroxyethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CRN 141-32-2 CMF C7 H12 O2

RN 64171-34-2 CAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-oxiranylmethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-90-1 CMF C6 H8 O3



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 22 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2000:377009 CAPLUS Full-text

DOCUMENT NUMBER: 133:18493

TITLE: Composite sheets using crosslinkable binders

and fiber sheets

INVENTOR(S): Fujimoto, Mitsuo; Watanabe, Koji; Hashimoto, Takashi

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	
PRIO AB	substitutes, comprison of substitutes, compr	ts with ise (A) oinders lic polyoprx.0.	improved du fiber sheet containing ymers. Thus, 06 dtex) was e-2-(diisopr	JP 1998-329454 JP 1998-329454 rability, suitable for s made of fine fibers crosslinkable acryloni a sheet of poly(ethylimpregnated with a scopylamino)ethyl methac polymer and acryloniti	19981119 < 19981119 < r leather having fineness itrile polymers and lene terephthalate) olution containing crylate-γ-
IC	methacrylate-γ-meth in H2O, and furthed discoloration afted ICM D06N003-04	r proce r 150 h	ssed to give -light irrad		
CC	ICS B32B005-02; B3 38-3 (Plastics Fabr			5 4	
СТ	Section cross-refer			indor composito shoot.	
ST	acrylic polymer crodisopropylaminoeth sheet; methacryloxy composite sheet; bu sheet; glycidyl met	sslinka yl meth trimeth tyl acr hacryla thalate	able binder of acrylate pole oxysilane polymer of the polymer of the fiber binder binder binder of the binder binder of the binder of the binder binder of the binder of t	lymer crosslinkable bi olymer crosslinkable b er crosslinkable binde crosslinkable binder s er composite sheet; le	nder inder r heet;
IT	Polysiloxanes, uses RL: IMF (Industrial (Properties); TEM ((Preparation); USES (acrylic; compos	manufa Technic (Uses) ite she	acture); POF cal or engine eets using o	(Polymer in formulati eered material use); P rosslinkable binders a es with improved durab	REP nd
IT	Binders Leather substitutes (composite sheet	s using	, crosslinkal	ole binders and fiber n improved durability)	<u>-</u> '
IT	engineered material (composite sheet sheets for leath	formuluse); s usinger subs	USES (Uses) porosslinka	(Properties); TEM (Te	
IT	(Uses) (fiber-reinforce	d; comp	osite sheet:	or engineered material s using crosslinkable er substitutes with im	
IT	Polyesters, uses RL: POF (Polymer in engineered material (fiber; composit	use); e sheet	USES (Uses) s using cros	(Properties); TEM (Te sslinkable binders and es with improved durab	
IT	271774-96-0P, Acryl	ic acid	l-acrylonitr:	ile-2-(diisopropylamin	
	methacrylate-γ-meth 271774-98-2P, Acryl			thoxysilane copolymer ylate-glycidyl	
				thoxysilane copolymer (Reactant); TEM (Tech	nical or

engineered material use); PREP (Preparation); RACT (Reactant or reagent);
USES (Uses)

(binder compo net; composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

IT 271774-94-8P, Acrylic acid-acrylonitrile-butyl acrylate-2-(diisopropylamino)ethyl methacrylate-glycidyl methacrylate-γ-methacryloxytrimethoxysilane hydrolytic copolymer RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

IT 25038-59-9, Poly(ethylene terephthalate), uses
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(fiber; composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

IT 271774-98-2P, Acrylonitrile-butyl acrylate-glycidyl
 methacrylate-γ-methacryloxypropyltrimethoxysilane copolymer
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent);
 USES (Uses)

(binder compo net; composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

RN 271774-98-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with butyl 2-propenoate, 2-propenenitrile and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0 CMF C10 H20 O5 Si

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

 $H \ge C \longrightarrow C H \longrightarrow C \longrightarrow N$

CM 4

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\smile}_{\text{CH}_2-\circ} \overset{\circ}{\parallel} \overset{\text{CH}_2}{\parallel}_{\text{C-Me}}$$

IT 271774-94-8P, Acrylic acid-acrylonitrile-butyl acrylate-2-(diisopropylamino)ethyl methacrylate-glycidyl methacrylate-γ-methacryloxytrimethoxysilane hydrolytic copolymer RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(composite sheets using crosslinkable binders and fiber sheets for leather substitutes with improved durability)

RN 271774-94-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[bis(1-methylethyl)amino]ethyl ester, polymer with butyl 2-propenoate, oxiranylmethyl 2-methyl-2-propenoate, 2-propenenitrile, 2-propenoic acid and 3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 16715-83-6 CMF C12 H23 N O2

CM 2

CRN 2530-85-0 CMF C10 H20 O5 Si

$$\begin{array}{c|c} \text{H2C} & \circlearrowleft & \circlearrowleft \\ \text{Me} & \text{C} & \text{C} & \circlearrowleft & \circlearrowleft \\ \text{Me} & \text{C} & \text{C} & \circlearrowleft & \circlearrowleft & \circlearrowleft \\ \text{Me} & & \text{Me} & & \circlearrowleft \\ \text{Me} & & \text{Me} & & \\ \end{array}$$

CRN 141-32-2 CMF C7 H12 O2

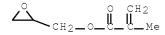
CM 4

CRN 107-13-1 CMF C3 H3 N

$H \ge C \longrightarrow C H \longrightarrow C \longrightarrow N$

CM 5

CRN 106-91-2 CMF C7 H10 O3



CM 6

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 23 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:96099 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 132:125354

TITLE: Compositions for batteries with lithium ion containing

electrolytes

INVENTOR(S): Moehwald, Helmut; Doetter, Gerhard; Blum, Rainer;

Keller, Peter; Bauer, Stephan; Bronstert, Bernd

PATENT ASSIGNEE(S): BASF A.-G., Germany SOURCE: Ger. Offen., 32 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DE 19835615	PA'	TENT	NO.			KINI)	DATE			APPI	ICAT	ION	NO.		D	ATE		
CA 2339617	DE	1983	5615			A1	_	2000	0210		 DE 1	.998-	1983	 5615		1	9980	806	<
CA 2339617	TW	4807	57			В		2002	0321		TW 1	.999-	8811	3392		1	9990	805	<
WO 2000008068 A1 20000217 WO 1999-EP5702 19990806 < W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HR, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, KG, MD, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9954206 A 20000228 AU 1999-54206 19990806 < EP 1109841 A1 20010627 EP 1999-940163 19990806 < EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <	CA	2339	617			A1		2000	0217		CA 1	.999-	2339	617		1	9990	806	<
W: AL, AU, BG, BR, BY, CA, CN, CZ, GE, HR, HU, ID, IL, IN, JP, KR, KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, KG, MD, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9954206	CA	2339	617			С		2009	0414										
KZ, LT, LV, MK, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, UA, US, ZA, AM, AZ, KG, MD, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9954206 A 20000228 AU 1999-54206 EP 1109841 A1 20010627 EP 1999-940163 19990806 < EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <	WO	2000	0800	68		A1		2000	0217		WO 1	999-	EP57	02		1	9990	806	<
ZA, AM, AZ, KG, MD, TJ, TM RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9954206 A 20000228 AU 1999-54206 EP 1109841 A1 20010627 EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <		W:	AL,	ΑU,	BG,	BR,	BY,	CA,	CN,	CZ,	GE,	HR,	HU,	ID,	IL,	IN,	JP,	KR,	
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE AU 9954206 A 20000228 AU 1999-54206 EP 1109841 A1 20010627 EP 1999-940163 19990806 < EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <			KΖ,	LT,	LV,	MK,	MX,	NO,	NΖ,	PL,	RO,	RU,	SG,	SI,	SK,	TR,	UA,	US,	
PT, SE AU 9954206 A 20000228 AU 1999-54206 19990806 < EP 1109841 A1 20010627 EP 1999-940163 19990806 < EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			ZA,	AM,	ΑZ,	KG,	MD,	TJ,	$_{ m MT}$										
AU 9954206 A 20000228 AU 1999-54206 19990806 < EP 1109841 A1 20010627 EP 1999-940163 19990806 < EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,		RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	
EP 1109841 A1 20010627 EP 1999-940163 19990806 < EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,			PT,	SE															
EP 1109841 B1 20020327 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <	AU	9954	206			Α		2000	0228		AU 1	.999-	5420	6		1	9990	806	<
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <	EP	1109	841			A1		2001	0627		EP 1	.999-	9401	63		1	9990	806	<
IE, SI, LT, LV, FI, RO JP 2002522872 T 20020723 JP 2000-563699 19990806 <	EP	1109	841			В1		2002	0327										
JP 2002522872 T 20020723 JP 2000-563699 19990806 <		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO											
JP 3954308 B2 20070808	JP	2002	5228	72		T		2002	0723		JP 2	2000-	5636	99		1	9990	806	<
	JP	3954	308			В2		2007	8080										
ES 2176017 T3 20021116 ES 1999-940163 19990806 <	ES	2176	017			Т3		2002	1116		ES 1	.999-	9401	63		1	9990	806	<
US 6475663 B1 20021105 US 2001-762076 20010201 <	US	6475	663			В1		2002	1105		US 2	2001-	7620	76		2	0010	201	<
PRIORITY APPLN. INFO.: DE 1998-19835615 A 19980806 <	PRIORIT	Y APP	LN.	INFO	.:						DE 1	.998–	1983	5615		A 1	9980	806	<
WO 1999-EP5702 W 19990806 <											WO 1	.999-	EP57	02		W 1	9990	806	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- The title composition contains (a) ≤ 1 weight% of a pigment (I) with a primary particle size of 5 nm to 100 μ m, which is a solid Ia or a battery cathode active material (Ib) or a an anode active material (Ic) or a mixture of the solid Ia with the compound Ib or the compound Ic, and (b) more than 99 to 100 weight% of a polymer material (II), which comprises 1 to 100 weight% of a polymer or a copolymer (IIa) containing chains and/or reactive groups on the sides which are capable of crosslinking reactions thermally and/or under UV radiation, and 0 to 99 weight% at least one polymer or copolymer (IIb), which is free of reactive groups.
- IC ICM H01M004-62
 - ICS H01G009-025; G01N027-406
- CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 38, 74
- IT Battery anodes
 - Battery cathodes

Battery electrolytes

Capacitors

Electrodes

Optical imaging devices

Sensors

Solid electrolytes

(compns. for batteries with lithium ion containing electrolytes)

acrylate-glycidyl methacrylate-ethylhexylacrylate copolymer, reaction

IT 96-49-1, Ethylene carbonate 105-58-8 1137-42-4D, 4-Hydroxybenzophenone, reaction product with lauryl acrylate-dihydrodicyclopentadienyl acrylate-glycidyl methacrylate-ethylhexylacrylate copolymer 9011-17-0, Hexafluoropropylene-vinylidene fluoride copolymer 12190-79-3, Cobalt lithium oxide colio2 21324-40-3, Lithium hexafluorophosphate 249756-67-0D, Lauryl acrylate-dihydrodicyclopentadienyl

product with 4-hydroxybenzophenone

RL: DEV (Device component use); USES (Uses)

(compns. for batteries with lithium ion containing electrolytes)

IT 249756-67-0D, Lauryl acrylate-dihydrodicyclopentadienyl

acrylate-glycidyl methacrylate-ethylhexylacrylate copolymer, reaction product with 4-hydroxybenzophenone

RL: DEV (Device component use); USES (Uses)

(compns. for batteries with lithium ion containing electrolytes)

RN 249756-67-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with dodecyl 2-propenoate, 2-ethylhexyl 2-propenoate and

3a, 4, 5, 6, 7, 7a-hexahydro-4, 7-methano-1H-inden-5(or 6)-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 903574-98-1

CMF C13 H16 O2

CCI IDS



CM 2

CRN 2156-97-0 CMF C15 H28 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3



CM 4

CRN 103-11-7 CMF C11 H20 O2

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)

L95 ANSWER 24 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1999:723073 CAPLUS Full-text

DOCUMENT NUMBER: 131:338050

TITLE: Compositions suitable for electrochemical cells INVENTOR(S): Mohwald, Helmut; Dotter, Gerhard; Blum, Rainer; Keller, Peter; Bauer, Stephan; Bronstert, Bernd

PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Germany

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT	NO.			KINI	D	DATE			APPL	ICAT	ION	NO.		D.	ATE		
WO	9957	161			A1	_	1999	1111	1	WO 1	999-	 EP30	 28		1	9990	504	<
	W:	AL,	ΑU,	BG,	BR,	BY,	CA,	CN,	CZ,	GE,	HU,	ID,	IL,	IN,	JP,	KR,	KΖ,	
							NZ,											
		AM,	ΑZ,	KG,	MD,	ТJ,	TM											
	RW:	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	
		PT,	SE															
DE	1981	9752			A1		1999	1111		DE 1	998-	1981	9752		1	9980	504	<
CA	2331	040			A1		1999	1111	(CA 1	999-	2331	040		1	9990	504	<
CA	2331	040			С		2009	1110										
AU	9938	269			А		1999	1123		AU 1	999-	3826	9		1	9990	504	<
EP	1088	007			A1		2001	0404	:	EP 1	999-	9208	45		1	9990	504	<
EP	1088	007			В1		2003	0226										
	R:	DE,	ES,	FR,	GB,	ΙT												
TW	4781	88			В		2002	0301		TW 1	999-	8810	7245		1	9990	504	<
	2002						2002			JP 2	000-	5471	29		1	9990	504	<
_	3904						2007											
_	2194				Т3		2003	_			999-					9990		
	1146				С		2004				999-					9990		
	2000						2001				000-					0001		
	6991				В1		2006	0131			000-	-				0001		
ORIT	APP	LN.	INFO	.:							998-					9980		
					0 53					-	999-		-			9990	504	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The title compns., which do not require inert gases for processing and are useful as electrodes, solid electrolytes, separators, etc., contain 1-99% pigments (primary particle size 5 nm-100 μm) and 99-1% polymers (1-100% polymers bearing groups crosslinkable by heat and/or UV; 99-0% polymers free from such reactive groups). A mixture of hydrophobized wollastonite 20, Me2CO 15, C3F6-CH2:CF2 copolymer (Kynarflex 2801) 6 and 300:480:120:100

dihydrodicyclopentadienyl acrylate-2-ethylhexyl acrylate-glycidyl methacrylate-lauryl acrylate copolymer 4.6 in xylene 34, and tris(2-ethylhexyl) phosphate 2.8 g was coated (30 μ m dry basis) on a solid support at 60°, dried, and cured photochem. to give a solid electrolyte useful with LiCoO2 cathodes and graphite anodes.

IC ICM C08F008-00 ICS H01M010-40

CC 38-3 (Plastics Fabrication and Uses) Section cross-reference(s): 42, 72

IT Anodes

Capacitors

Cathodes

Electrochemical cells

Pigments, nonbiological

Solid electrolytes

(compns. suitable for electrochem. cells)

IT 9002-84-0 9002-88-4 9003-07-0 9003-53-6 24937-79-9 249756-67-0 249756-68-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for electrochem. cells)

IT 249756-67-0 249756-68-1

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(compns. suitable for electrochem. cells)

RN 249756-67-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with dodecyl 2-propenoate, 2-ethylhexyl 2-propenoate and 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

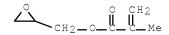
CRN 903574-98-1 CMF C13 H16 O2 CCI IDS



CM 2

CRN 2156-97-0 CMF C15 H28 O2

CRN 106-91-2 CMF C7 H10 O3



CM 4

CRN 103-11-7 CMF C11 H20 O2

RN 249756-68-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, oxiranylmethyl ester, polymer with 2-ethylhexyl 2-propenoate and 3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-inden-5(or 6)-yl 2-propenoate (9CI) (CA INDEX NAME)

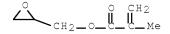
CM 1

CRN 903574-98-1 CMF C13 H16 O2 CCI IDS



CM 2

CRN 106-91-2 CMF C7 H10 O3



CRN 103-11-7 CMF C11 H20 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 25 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1999:392849 CAPLUS Full-text

DOCUMENT NUMBER: 131:33836

TITLE: Battery binders, battery electrolyte slurries,

electrodes for secondary lithium batteries and the

batteries

INVENTOR(S): Maeda, Koichiro; Nakayama, Akira; Miki, Hideo;

Yamamoto, Akihika

PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE					
	JP 11167921	A	19990622	JP 1997-347242	19971202 <					
	JP 4438102	B2	20100324							
PRIO	RITY APPLN. INFO.:			JP 1997-347242	19971202 <					
AB	The binders are ord	osslinke	ed polymer pa	articles formed by post	crosslinking					
	polymer particles containing ≤30% un-polymerized monomers. The battery electrodes are prepared from electrode slurries containing the binder, the									
	electrode active ma	ass, and	l a liquid							
IC	ICM H01M004-62									
	ICS H01M004-02; H0	1M010-4	0							
CC	52-2 (Electrochemic	al, Rad	iational, and	d Thermal Energy Technol	logy)					
~ —		_								

ST lithium battery electrode crosslinked polymer binder

IT Battery electrodes

Binders

(post crosslinked polymer binders for electrode active mass slurries for secondary lithium batteries)

IT 71426-98-7

RL: DEV (Device component use); USES (Uses) (core particles for polymer binders for electrode active mass slurries for secondary lithium batteries) 34150-22-6 35919-18-7 53754-89-5 ΙT RL: DEV (Device component use); USES (Uses) (crosslinked; post crosslinked polymer binders for electrode active mass slurries for secondary lithium batteries) ΙT 7440-44-0, Carbon, uses 79487-16-4 226386-67-5 RL: DEV (Device component use); USES (Uses) (post crosslinked polymer binders for electrode active mass slurries for secondary lithium batteries) 71426-98-7 ΙT RL: DEV (Device component use); USES (Uses) (core particles for polymer binders for electrode active mass slurries for secondary lithium batteries) RN 71426-98-7 CAPLUS CN Butanedioic acid, 2-methylene-, polymer with 1,3-butadiene, butyl 2-propenoate and ethenylbenzene (CA INDEX NAME) CM CRN 141-32-2 CMF C7 H12 O2 n-BuO-C-CH-CH2 CM 2 CRN 106-99-0 CMF C4 H6 H 2 C === C H == C H 2 CM 3 CRN 100-42-5 CMF C8 H8 H2C == CH-Ph CM4 CRN 97-65-4

CMF C5 H6 O4

$$\begin{matrix} & \overset{\text{CH}_2}{\text{H}_{\text{O2C}}} \\ & \overset{\text{CH}_2}{\text{C}} \\ & \overset{\text{CH}_2}{\text{C}} \\ & \overset{\text{CH}_2}{\text{C}} \\ \end{matrix}$$

IT 79487-16-4 226886-67-5

RL: DEV (Device component use); USES (Uses)
(post crosslinked polymer binders for electrode active mass slurries for secondary lithium batteries)

RN 79487-16-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, diethenylbenzene and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 1321-74-0 CMF C10 H10 CCI IDS



CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 226886-67-5 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with 1,3-butadiene, butyl 2-propenoate, diethenylbenzene, ethenylbenzene, methylenebutanedioic acid and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 1321-74-0 CMF C10 H10 CCI IDS



CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.



CM 4

CRN 106-99-0 CMF C4 H6 H 2 C — C H — C H = C H 2

CM 5

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM 6

CRN 97-65-4 CMF C5 H6 O4

CM 7

CRN 80-62-6 CMF C5 H8 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 26 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1999:12432 CAPLUS Full-text

DOCUMENT NUMBER: 130:67258

TITLE: Crosslinkable acrylic polymer compositions

and their uses

INVENTOR(S): Lau, Willie; Finley, Maureen Joanne; Williams, Martin

Marion; Morris, Hal Conley

PATENT ASSIGNEE(S): Rohm and Haas Company, USA SOURCE: Eur. Pat. Appl., 10 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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                             _____
                                       ______
    EP 885906
                      A2
                             19981223
                                       EP 1998-304464
                                                             19980605 <--
    EP 885906
                      A3
                             19991201
    EP 885906
                       В1
                             20030212
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
           IE, SI, LT, LV, FI, RO
    AU 9869967
                      А
                           19981224
                                       AU 1998-69967
                                                             19980609 <--
    AU 755987
                      В2
                            20030102
                                                           19980612 <--
    CA 2240613
                            19981220 CA 1998-2240613
                      A1
    BR 9802029
                            19991214 BR 1998-2029
                                                             19980618 <--
                      A
    US 6191244
                      B1 20010220 US 1998-99312
                                                             19980618 <--
                          19981230 CN 1998-114949
                      Α
    CN 1203245
                                                             19980619 <--
                      С
    CN 1188462
                            20050209
                           19990420 JP 1998-174389
                      A
    JP 11106437
                                                             19980622 <--
    US 6225242
                      B1 20010501 US 2000-562342
                                                             20000501 <--
    US 20010005734
                      A1 20010628
                                       US 2001-776190
                                                             20010205 <--
    US 6300409
                      B1 20011009
PRIORITY APPLN. INFO.:
                                        US 1997-50390P
                                                         P 19970620 <--
                                                          A3 19980618 <--
                                        US 1998-99312
                                        US 2000-562342
                                                         A3 20000501 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     The composition, useful as a binder for finishing fabrics and paper to
     improved water repellency and durability, comprises (A) a polymer obtained
     from 9.5-99.9 parts \geq 1 C12-40 alkyl ester (meth)acrylate, 0-90 parts \geq 1 C\leq 15
     ethylenically unsatd. monomer, 0-90 parts \geq 1 ethylenically unsatd. acid or its
     salt and 0.1-10 parts ≥1 crosslinkable monomer (such as methacrylamide and N-
    methylmethacrylamide); and (B) optionally \geq 1 crosslinking agent.
IC
    ICM C08F220-18
    ICS D06M015-263
    37-6 (Plastics Manufacture and Processing)
    Section cross-reference(s): 40, 43
```

- CC
- acrylic polymer latex finishing nonwoven fabric water repellency; ST durability crosslinkable acrylic polymer emulsion finishing paper
- ΙT Aminoplasts
 - RL: MOA (Modifier or additive use); USES (Uses) (Aricel PC 6A, crosslinking agent; crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability)
- Nonwoven fabrics ΙT

Paper

Textiles

(crosslinkable acrylic polymer compns. for)

ΙT Binders

Crosslinking agents

(crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability)

ΙT Polymerization

(emulsion; crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability)

- ΙT Polyester fibers, uses
 - RL: TEM (Technical or engineered material use); USES (Uses) (fabrics; crosslinkable acrylic polymer compns. for)
- ΙT 9003-08-1, Cymel 303
 - RL: MOA (Modifier or additive use); USES (Uses) (Aricel PC 6A, crosslinking agent; crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability)

IT 218147-18-3P 218147-19-4P 218147-21-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability)

IT 218147-18-3P 218147-19-4P 218147-21-8P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinkable acrylic polymer compns. for finishing fabrics and paper to improved water repellency and durability)

RN 218147-18-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate, 2-methyl-2-propenamide and octadecyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7 CMF C22 H42 O2

CM 2

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {\rm H2C} \quad {\rm O} \\ {\rm Me} \quad {\rm C} \quad {\rm C} \quad {\rm NH-CH2-OH} \end{array}$$

CM 3

CRN 142-90-5 CMF C16 H30 O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

CM 7

CRN 79-39-0 CMF C4 H7 N O

RN 218147-19-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

$$\begin{array}{c}
\text{H2C} \\
\text{Me} \\
\text{C} \\
\text{C} \\
\text{C}
\end{array}$$

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, dodecyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate, octadecyl 2-methyl-2-propenoate and 2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 32360-05-7 CMF C22 H42 O2

CM 2

CRN 923-02-4 CMF C5 H9 N O2

CM 3

CRN 142-90-5 CMF C16 H30 O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CM 7

CRN 79-06-1 CMF C3 H5 N O

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (17 CITINGS)

L95 ANSWER 27 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:806721 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 130:53762

TITLE: Thermally stable and moisture-curable powder-paint

binder compositions

INVENTOR(S): Stanssens, Dirk Armand Wim; Van Benthem, Rudolfus

Antonius Theodorus Maria; Hendriks, Patrick Herman

Marie

PATENT ASSIGNEE(S): Dsm N.V., Neth.

SOURCE: PCT Int. Appl., 31 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.			KIN	D	DATE			APPL	ICAT	ION :	NO.		D	ATE	
WO 9855	550			A1	_	 1998	1210		 WO 1	 998-:	 NL32	0		1	9980	602 <
W:	AL,	ΑU,	ΒA,	BB,	BG,	BR,	CA,	CN,	CU,	CZ,	EE,	GE,	HU,	ID,	IL,	IS,
	JP,	KP,	KR,	LC,	LK,	LR,	LT,	LV,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,
	SG,	SI,	SK,	SL,	TR,	TT,	UA,	US,	UZ,	VN,	YU,	AM,	AZ,	BY,	KG,	KΖ,
	MD,	RU,	ТJ,	TM												
RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	DE,	DK,	ES,
	FΙ,	FR,	GB,	GR,	ΙE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,
	CM,	GA,	GN,	ML,	MR,	NE,	SN,	TD,	ΤG							
NL 1006	251			C2		1998	1208		NL 1	997-	1006	251		1	9970	606 <

AU 9876779 A 19981221 AU 1998-76779 19980602 <--PRIORITY APPLN. INFO.: NL 1997-1006251 A 19970606 <--WO 1998-NL320 W 19980602 <---

- AB Thermally stable, moisture-curable powder paint binder composition with a Tg of 30° or a melting temperature of 30° comprises a polymer and optionally a crosslinker. At least one of these components contains a moisture-latent reactive group. The polymer is selected from the group consisting of a saturated polyester, unsatd. polyester, polyacrylate, polyurethane, polycarbonate, polybutadiene, polystyrene, polysiloxane, or a copolymer hereof. The moisture-latent reactive group is a moisture-latent amine group, a hydrolyzable silyl group, a moisture-latent alc., a moisture-latent acid, a moisture-latent aldehyde group or a moisture-latent ketone group.
- IC ICM C09D005-03 ICS C08G063-91
- CC 42-10 (Coatings, Inks, and Related Products)
- IT Binders

(thermally stable and moisture-curable powder-paint binder compns.)

24801-88-5DP, 3-Isocyanatopropyltriethoxysilane, reaction products with polyesters 26811-89-2DP, Isophthalic acid-neopentyl glycol copolymer, reaction products with isocyanatopropyltriethoxysilane 26913-26-8DP, Isophthalic acid-neopentyl glycol copolymer, sru, reaction products with isocyanatopropyltriethoxysilane 30261-69-9DP, Glycidyl methacrylate-methyl methacrylate-butyl acrylate copolymer, cyclic carbonate-functional group-containing

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermally stable and moisture-curable powder-paint binder compns.)

30261-69-9DP, Glycidyl methacrylate-methyl methacrylate-butyl
acrylate copolymer, cyclic carbonate-functional group-containing
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
(Technical or engineered material use); PREP (Preparation); USES (Uses)

(thermally stable and moisture-curable powder-paint binder compns.)

RN 30261-69-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

CRN 80-62-6 CMF C5 H8 O2



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD

(1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 28 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:786159 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 130:67550

TITLE: Manufacture of moldings with lightweight and good

strength for building materials

INVENTOR(S): Tanaka, Koichi; Doi, Kiyoto; Ueda, Kyoichi; Kodo,

Nobuhiko

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10324581	A	19981208	JP 1997-133112	19970523 <
PRIORITY APPLN. INFO.:			JP 1997-133112	19970523 <

- AB Moldings are manufactured by mixing inorg. cellular particles with binders comprising isocyanates and ≥ 1 compound chosen from amino resins, phenolic resins, acrylic emulsions, and/or starch, hot pressing, and drying. Thus, Shirasu balloon 100, HCHO-urea-melamine copolymer 13, U-Loid UR 4000 3, and H2O 8 parts were mixed, spread in a frame, pressed at 80°, and dried at 180° to give a 9-mm thickness mat, which was left at 20° and 60% relative humidity for 1 wk to show d. 0.38 g/cm3, thickness 9.02 mm, and bending strength 221 N/cm2 (at 25°) and 185 N/cm2 (at 40°).
- IC ICM C04B038-08 ICS C04B038-00
- CC 38-3 (Plastics Fabrication and Uses)
 Section cross-reference(s): 58

IT Binders

Cellular materials Construction materials Lightweight materials

(manufacture of lightweight moldings containing inorg. cellular particles

and

polymer binders for building materials)

IT Aminoplasts

Phenolic resins, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

```
(polyisocyanate-crosslinked; manufacture of lightweight moldings
        containing inorg, cellular particles and polymer binders for building
       materials)
ΙT
     200506-57-6P, Formaldehyde-phenol-U-Loid UR 4000 copolymer
     218297-79-1P, Butyl acrylate-glycidyl methacrylate-methyl
     methacrylate-U-Loid UR 4000 copolymer 218297-80-4P 218297-81-5P,
     Formaldehyde-melamine-starch-urea-U-Loid UR 4000 copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (manufacture of lightweight moldings containing inorg. cellular particles
and
        polymer binders for building materials)
     9003-35-4P, Formaldehyde-phenol copolymer
                                                 25036-13-9P,
ΤТ
     Formaldehyde-melamine-urea copolymer 30261-69-9P, Butyl
     acrylate-qlycidyl methacrylate-methyl methacrylate copolymer
     138981-63-2P, Formaldehyde-melamine-starch-urea copolymer
     RL: IMF (Industrial manufacture); TEM (Technical or engineered material
     use); PREP (Preparation); USES (Uses)
        (manufacture of lightweight moldings containing inorg. cellular particles
and
       polymer binders for building materials)
     218297-79-1P, Butyl acrylate-glycidyl methacrylate-methyl
ΤТ
     methacrylate-U-Loid UR 4000 copolymer
     RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP
     (Properties); TEM (Technical or engineered material use); PREP
     (Preparation); USES (Uses)
        (manufacture of lightweight moldings containing inorg. cellular particles
and
       polymer binders for building materials)
RN
     218297-79-1 CAPLUS
     2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl
CN
     2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and U-Loid UR 4000
     (9CI) (CA INDEX NAME)
     СМ
         1
     CRN 97397-26-7
     CMF Unspecified
     CCI PMS, MAN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
     CM
     CRN 141-32-2
     CMF C7 H12 O2
 n-BuO_C_CH__CH2
     CM
          3
     CRN 106-91-2
     CMF C7 H10 O3
```

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} \overset{\circ}{\longrightarrow} \overset{\circ}{\underset{\text{C}}{\parallel}} \overset{\text{CH}_2}{\underset{\text{C}}{\parallel}}$$

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} {}^{\text{H}_2\text{C}} \\ \\ \text{Me} \\ - \\ \text{C} \\ - \\ \text{C} \\ - \\ \text{OMe} \end{array}$$

IT 30261-69-9P, Butyl acrylate-glycidyl methacrylate-methyl

methacrylate copolymer

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manufacture of lightweight moldings containing inorg. cellular particles

and

polymer binders for building materials)

RN 30261-69-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{ \smile}_{\text{CH}_2-\circ-}\overset{\circ}{\underset{\text{CH}_2}{\parallel}}\overset{\text{CH}_2}{\underset{\text{C-Me}}{\parallel}}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2



L95 ANSWER 29 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:735538 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 130:40968

TITLE: Polymeric binders for nonaqueous battery electrodes

INVENTOR(S): Noritake, Masayoshi; Ito, Nobuyuki

PATENT ASSIGNEE(S): JSR Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10302799	A	19981113	JP 1997-121444	19970425 <
JP 3601250	В2	20041215		
PRIORITY APPLN. INFO.:			JP 1997-121444	19970425 <

AB The binders are aqueous dispersions containing vinylidene fluoride polymers having functional groups. Use of the binders give batteries with high performance and storage stability.

IC ICM H01M004-62 ICS C08L027-16

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 35

IT Battery electrodes

Binders

(vinylidene fluoride polymers as binders for nonaq. battery electrodes)

IT 216673-45-9P 216673-56-2P 216673-66-4P

RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (vinylidene fluoride polymers as binders for nonaq. battery electrodes)

IT 216673-45-9P 216673-56-2P 216673-66-4P

RL: DEV (Device component use); PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (vinylidene fluoride polymers as binders for nonag. battery electrodes)

RN 216673-45-9 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, 1,1-difluoroethene, 1,1,2,3,3,3-hexafluoro-1-propene, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 116-15-4 CMF C3 F6

CM 4

CRN 97-65-4 CMF C5 H6 O4

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

CRN 75-38-7 CMF C2 H2 F2

RN 216673-56-2 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-difluoroethene, ethenylbenzene, 1,1,2,3,3,3-hexafluoro-1-propene and N-(hydroxymethyl)-2-propenamide, graft (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 116-15-4 CMF C3 F6

CM 4

CRN 100-42-5 CMF C8 H8 H2C ___ CH_Ph

CM 5

CRN 79-10-7 CMF C3 H4 O2

CM 6

CRN 75-38-7 CMF C2 H2 F2

RN 216673-66-4 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, 1,1-difluoroethene, 1,1,2,3,3,3-hexafluoro-1-propene, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, graft (9CI) (CA INDEX NAME)

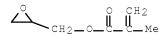
CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 116-15-4 CMF C3 F6

CRN 106-91-2 CMF C7 H10 O3



CM 4

CRN 97-65-4 CMF C5 H6 O4

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

CM 7

CRN 75-38-7 CMF C2 H2 F2

$$\mathbf{F}_{\mathbf{F}}^{\mathbf{CH}_{2}}$$

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L95 ANSWER 30 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:631684 CAPLUS Full-text

DOCUMENT NUMBER: 129:253552

ORIGINAL REFERENCE NO.: 129:51461a,51464a

TITLE: Binder for dielectric ceramic material providing green

sheet with high toughness under pressure

INVENTOR(S): Sasaki, Michiyuki

PATENT ASSIGNEE(S): TDK Electronics Co., Ltd., Japan; TDK Corporation

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10259062	A	19980929	JP 1997-63620	19970317 <
JP 3743588	В2	20060208		

PRIORITY APPLN. INFO.: JP 1997-63620 19970317 <--

AB The binder comprises a copolymer of C1-6-alkyl methacrylate, C1-6-alkyl acrylate, and a fatty acid and shows Mn 15,000-220,000, Mw 75,000-800,000, and Mw/Mn 2.0-6.7.

IC ICM C04B035-632

ICS C08F002-18; C09J133-12

CC 76-10 (Electric Phenomena)

Section cross-reference(s): 38, 57

IT Binders

Slurries

(binder for dielec. ceramic material providing green sheet with high toughness under pressure)

IT Ceramic capacitors

(multilayer; binder for dielec. ceramic material providing green sheet with high toughness under pressure)

IT 12047-27-7, Barium titanate, processes 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(binder for dielec. ceramic material providing green sheet with high toughness under pressure)

IT 26300-51-6, Acrylic acid-butyl acrylate-methyl methacrylate copolymer

RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

RN 26300-51-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CRN 80-62-6 CMF C5 H8 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 31 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1998:614400 CAPLUS Full-text

DOCUMENT NUMBER: 129:291124

ORIGINAL REFERENCE NO.: 129:59321a,59324a

TITLE: Aqueous acrylic resin compositions with excellent

flexibility and water, heat, and solvent resistance

INVENTOR(S): Sato, Masaaki; Kuroume, Masanari

PATENT ASSIGNEE(S): Nippon Carbide Industries Co., Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 10251474	A	19980922	JP 1997-69000	19970307 <		
JP 3391649	В2	20030331				
PRIORITY APPLN. INFO.:			JP 1997-69000	19970307 <		

AB The compns., useful for sizes, coatings, and binders, comprise (A) water-dispersible acrylic copolymers having groups (excluding oxazoline group) reactive to oxazoline-reactive groups, (B) water-soluble or water-dispersible macromols. (excluding A) containing oxazoline-reactive groups, and (C) oxazoline-containing water-soluble macromols. Thus, blending 200 parts aqueous dispersion of 50:34.9:10:5:0.1 (%) Et acrylate (I)-Bu acrylate (II)-acrylonitrile-glycidyl methacrylate-acrylic acid copolymer (solids 50.1 %) with 23 parts 30:30:40 (%) I-II-methacrylic acid copolymer (solids 30%) and

```
12.5 parts Epocros WS 500 (solids 40%) gave a composition showing pH 7.6,
     solids 46.1%, and viscosity 3200 cP. A cotton fabric was printed with a
     textile printing paste containing the above composition, treated at 140^{\circ} for
     10 min, and washed to show no damages on the printed parts.
IC
     ICM C08L033-14
     ICS C08G073-00; C08L101-02; D06M015-31
CC
     40-9 (Textiles and Fibers)
     Section cross-reference(s): 42
     oxazoline carboxyl epoxy contq acrylic size; flexibility fiber size aq
ST
     acrylic resin; self crosslinkable acrylic resin flexible
     coating; solvent heat water resistant acrylic compn
ΙT
     Binders
     Fabric finishing
     Nonwoven fabrics
     Sizes (agents)
     Textile printing
        (aqueous acrylic resin compns. with excellent flexibility and water, heat,
        and solvent resistance)
     214358-21-1P
                  214358-23-3P
ΙT
                                  214358-25-5P
     214358-27-7P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (aqueous acrylic resin compns. with excellent flexibility and water, heat,
        and solvent resistance)
     214358-21-1P
                   214358-23-3P
                                   214358-25-5P
ΤT
     214358-27-7P
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (aqueous acrylic resin compns. with excellent flexibility and water, heat,
        and solvent resistance)
RN
     214358-21-1 CAPLUS
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
     4,5-dihydro-2-(1-methylethyl)oxazole, ethyl 2-propenoate, methyl
     2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate,
     2-propenenitrile and 2-propenoic acid, ammonium salt (9CI) (CA INDEX
    NAME)
     CM
          1
     CRN 214358-20-0
          (C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 .
          C3 H4 O2 . C3 H3 N)x
     CCI PMS
          CM
               2
          CRN 10471-78-0
          CMF C6 H9 N O
```



CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 107-13-1 CMF C3 H3 N

$$H \supseteq C \longrightarrow C H \longrightarrow C \longrightarrow N$$

CM 6

CRN 106-91-2 CMF C7 H10 O3

CM 7

CRN 80-62-6 CMF C5 H8 O2

CM 8

CRN 79-41-4 CMF C4 H6 O2

CM 9

CRN 79-10-7 CMF C3 H4 O2

RN 214358-23-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM :

CRN 214358-22-2

CMF (C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2)x

CCI PMS

CM 2

CRN 10471-78-0 CMF C6 H9 N O

CM 3

CRN 141-32-2 CMF C7 H12 O2

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{ \smile}_{\text{CH}_2-\circ-}\overset{\circ}{\underset{\text{C}}{\parallel}}\overset{\text{CH}_2}{\underset{\text{C}_{-\text{Me}}}{\parallel}}$$

CM 6

CRN 80-62-6 CMF C5 H8 O2

CM 7

CRN 79-41-4 CMF C4 H6 O2

CM 8

CRN 79-10-7 CMF C3 H4 O2

214358-25-5 CAPLUS RN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, CN 4,5-dihydro-2-(1-methylethyl)oxazole, 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate, ammonium salt (9CI) (CA INDEX NAME) 1 CM CRN 214358-24-4 (C11 H20 O2 . C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2)x CCI PMS CM 2 CRN 10471-78-0 CMF C6 H9 N O

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 106-91-2

CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} \overset{\circ}{\longrightarrow} \overset{\circ}{\text{CH}_2} \overset{\text{CH}_2}{\longleftarrow}_{\text{Me}}$$

CM 6

CRN 103-11-7 CMF C11 H20 O2

CM 7

CRN 80-62-6 CMF C5 H8 O2

CM 8

CRN 79-41-4 CMF C4 H6 O2

RN 214358-27-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 4,5-dihydro-2-(1-methylethyl)oxazole, ethenylbenzene, ethyl 2-propenoate, methyl 2-methyl-2-propenoate, oxiranylmethyl 2-methyl-2-propenoate and 2-propenoic acid, ammonium salt (9CI) (CA INDEX NAME)

CM 1

CRN 214358-26-6

CMF (C8 H8 . C7 H12 O2 . C7 H10 O3 . C6 H9 N O . C5 H8 O2 . C5 H8 O2 . C4 H6 O2 . C3 H4 O2)×

CCI PMS

CRN 10471-78-0 CMF C6 H9 N O



CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 106-91-2 CMF C7 H10 O3

CM 6

CRN 100-42-5 CMF C8 H8 $H_2C \longrightarrow CH \longrightarrow Ph$

CM 7

CRN 80-62-6 CMF C5 H8 O2

CM 8

CRN 79-41-4 CMF C4 H6 O2

CM 9

CRN 79-10-7 CMF C3 H4 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 32 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1997:794056 CAPLUS Full-text

DOCUMENT NUMBER: 128:108413

ORIGINAL REFERENCE NO.: 128:21129a,21132a

TITLE: Electrophotographic toner using binder comprising

carboxy-substituted vinyl resin and
glycidyl-substituted resin as hardener

INVENTOR(S): Okada, Yasuo; Sakata, Kazuya; Hata, Masaaki PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan; Mitsui

Chemicals, Inc.

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

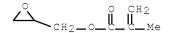
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE					
	JP 09319140 JP 3532033	 А В2	19971212 20040531	JP 1996-131648	19960527 <					
PRIC	RITY APPLN. INFO.:			JP 1996-131648	19960527 <					
AB	a glycidyl-contain 100,000 as a cross value of 1-30 mg K toner is applicabl	ing vin linking OH/g an e to hi	yl resin wit agent and a d glass tran gh speed dev	prant and the following the weight average moloused countries of the containing vinguistion temperature Toyeloper and shows improved the countries of the count	weight of 10,000- yl resin with acid g of 40-70°. The coved reproduction					
IC	ICM G03G009-087 ICS G03G009-08	1 1	1, 1	Ş	J J					
CC	74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 38									
IT		toners	for high spe	ed developer using bi idyl-substituted resi.						
IT	carboxy-substituted resin and glycidyl-substituted resin hardener) 38637-59-1P, Butyl acrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (binder; electrophotog. toner for high speed developer using binder comprising carboxy-substituted resin and glycidyl-substituted resin hardener)									
IT	nardener) 38637-59-1P, Butyl acrylate-glycidyl methacrylate-methacrylic acid-styrene copolymer RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (binder; electrophotog. toner for high speed developer using binder comprising carboxy-substituted resin and glycidyl-substituted resin hardener)									
RN CN				with butyl 2-propenoa -methyl-2-propenoate						
	CM 1									
	CRN 141-32-2 CMF C7 H12 O2									
	0									

n-Bu0-C-CH-CH₂

CM 2

CRN 106-91-2 CMF C7 H10 O3



CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH \longrightarrow Ph$

CM 4

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 33 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1997:386591 CAPLUS Full-text

DOCUMENT NUMBER: 127:96486

ORIGINAL REFERENCE NO.: 127:18573a,18576a

TITLE: Preparation of rapid-curing low-temperature self-

crosslinking binder for pigment printing

CLOSSILINAING DINCEL TO PIGNETT PITTERING

AUTHOR(S): Li, Runsong; Chen, Jinxi; Liu, Hanzhen; Zhao, Zhaojun

CORPORATE SOURCE: Dep. Chem., Huazhong Univ. Sci. Technol., Wuhan,

430074, Peop. Rep. China

SOURCE: Huazhong Ligong Daxue Xuebao (1996), 24(Suppl. 2),

134-136

CODEN: HLDXE6; ISSN: 1000-8616 Huazhong Ligong Daxue Xuebao

PUBLISHER: Huazhong Lic DOCUMENT TYPE: Journal

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB A rapid-curing low-temperature acrylate self-crosslinking binder HS-II was manufactured from Bu acrylate, Et acrylate, styrene, Me methacrylate, glycidyl methacrylate, 2-aminoethyl acrylate, N-butoxymethyl methacrylamide, N-hydroxy Me acrylamide, methacrylic acid by core shell polymerization The HS-II blinder is suitable for printing cotton and synthetic fiber at low temps.

CC 40-6 (Textiles and Fibers)

IT Crosslinking

(autocrosslinking; preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing)

IT Polymerization

(emulsion, core-shell; preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing)

IT Binders

Textile printing

(preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing)

IT 192138-56-0P, 2-Aminoethyl acrylate-N-butoxymethyl methacrylamide-butyl acrylate-ethyl acrylate-glycidyl methacrylate-N-hydroxymethyl acrylamide-methacrylic acid-methyl methacrylate-styrene copolymer

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(emulsion, HS-II; preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing)

IT 192138-56-0P, 2-Aminoethyl acrylate-N-butoxymethyl methacrylamide-butyl acrylate-ethyl acrylate-glycidyl methacrylate-N-hydroxymethyl acrylamide-methacrylic acid-methyl methacrylate-styrene copolymer

RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(emulsion, HS-II; preparation of rapid-curing low-temperature self-crosslinking binder for pigment printing)

RN 192138-56-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-aminoethyl 2-propenoate, N-(butoxymethyl)-2-methyl-2-propenamide, butyl 2-propenoate, ethenylbenzene, ethyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 7659-38-3 CMF C5 H9 N O2

CM 2

CRN 5153-77-5 CMF C9 H17 N O2

CM 3

CRN 924-42-5 CMF C4 H7 N O2

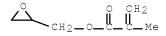
CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 140-88-5 CMF C5 H8 O2

CM 6

CRN 106-91-2 CMF C7 H10 O3



CM 7

CRN 100-42-5 CMF C8 H8

H 2 C ____ C H__ P h

CM 8

CRN 80-62-6 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CH2 II Me—C—CO2H

L95 ANSWER 34 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1996:35300 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 124:89826

ORIGINAL REFERENCE NO.: 124:16827a,16830a

TITLE: Water-based materials for conditioning underlayers and

finishing of building exterior walls $% \left(1\right) =\left(1\right) \left(1\right) \left($

INVENTOR(S): Ikeuchi, Tadahiko; Asada, Yoshibumi

PATENT ASSIGNEE(S): S K Kaken Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07278463	A	19951024	JP 1994-100740	19940413 <
JP 3041189	В2	20000515		

PRIORITY APPLN. INFO.: JP 1994-100740 19940413 <--

Title materials contain inorg. powders and emulsions of (1) triple layers, i.e., (A) epoxy-containing polymer layers, (B) copolymers inactive to epoxy or carboxyl, and (C) carboxyl- and amide-substituted polymer layers, or of (2) multilayer structures of A (as center)-C double layers associated with (a) B and C on A or with (b) C on A at pigment volume concentration (V) 40-70%. Building exterior walls are coated with the compns. and overcoated with (1') silicone-type water-based resin enamels or with (2') single-layer elastic finishing materials. Thus, 30.00 parts emulsion comprising 23.33:54.43:0.50 styrene (I)-Bu acrylate (II)-glycidyl methacrylate copolymer inner layer and 5.83:13.61:0.30:2.00 I-II-Me methacrylate-acrylamide copolymer outer layer was mixed with TiO2 5.00, heavy CaCO3 23.79, and other additives to give a composition (V 40%), which was coated on a slate plate to give a test piece showing good peeling and cracking resistance.

IC ICM C09D005-00

ICS C09D005-00; B05D007-24; C08G059-40; C09D151-00; C09D163-00; E04F013-02

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 42

IT Siloxanes and Silicones, preparation

RL: IMF (Industrial manufacture); MSC (Miscellaneous); PREP (Preparation) (crosslinkable, top coating; water-based undercoatings including multilayer emulsions and inorg. powder for building exterior walls)

IT 172887-72-8P, Cyclohexyl methacrylate-2-ethylhexyl acrylate-γ-methacryloyloxypropyltrimethoxysilane copolymer

RL: IMF (Industrial manufacture); MSC (Miscellaneous); PREP (Preparation) (crosslinkable, top coating; water-based undercoatings including multilayer emulsions and inorg. powder for building exterior walls)

IT 26428-43-3P, Butyl acrylate-glycidyl methacrylate-styrene copolymer 34871-68-6P, Acrylamide-butyl acrylate-methyl methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsions; water-based undercoatings including multilayer emulsions and inorg. powder for building exterior walls)

IT 26428-43-3P, Butyl acrylate-glycidyl methacrylate-styrene copolymer

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsions; water-based undercoatings including multilayer emulsions and inorg. powder for building exterior walls)

RN 26428-43-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

CM 3

CRN 100-42-5 CMF C8 H8

H2C ___ CH __ Ph

DOCUMENT NUMBER: 122:268117

ORIGINAL REFERENCE NO.: 122:48905a,48908a

TITLE: Heat-resistant binders for nonwovens for automobile

interiors

INVENTOR(S): Arimitsu, Masaru; Inoe, Masahiro PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Japan SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07026461	A	19950127	JP 1993-164392	19930702 <
PRIORITY APPLN. INFO.:			JP 1993-164392	19930702 <
3.5	7		(7)	100

AB The binders comprise polymer emulsions (A) prepared by copolymg. 100 parts (solids) monomer pseudo emulsions with 5-100 parts monomers comprising 50-100% (meth)acrylamide, and optionally contain 3-30 parts film-forming agents per 100 parts (solids) A emulsion. A nonwoven fabric was dipped in a solution containing 100 parts of 30% (solids) acrylamide-2-ethylhexyl acrylate-2-hydroxyethyl methacrylate-methacrylamide-methacrylic acid-N-methylolmethacrylamide-styrene copolymer emulsion and 10 parts H2O, squeezed, and dried to give a nonwoven fabric with tensile strength 30 kg/5 cm (room temperature) and 26 kg/5 cm (190°).

IC ICM D04H001-58

ICS C08F002-22; C08F020-56; C08L033-26; D06M015-285

CC 40-10 (Textiles and Fibers)

IT Binding materials

((meth)acrylamide copolymers; heat-resistant binders for nonwovens for automobile interiors)

IT 123467-89-0P 137819-09-1P 137819-11-5P 162706-35-6P 162706-36-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(heat-resistant binders for nonwovens for automobile interiors)

IT 162706-35-6P 162706-36-7P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(heat-resistant binders for nonwovens for automobile interiors)

RN 162706-35-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

RN 162706-36-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-methyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 868-77-9 CMF C6 H10 O3

CM 3

CRN 103-11-7 CMF C11 H20 O2

CM 4

CRN 100-42-5 CMF C8 H8

 $H2C \longrightarrow CH - Ph$

CM 5

CRN 79-41-4 CMF C4 H6 O2

CRN 79-39-0 CMF C4 H7 N O

CM 7

CRN 79-06-1 CMF C3 H5 N O

L95 ANSWER 36 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1993:410397 CAPLUS Full-text

DOCUMENT NUMBER: 119:10397 ORIGINAL REFERENCE NO.: 119:2073a

TITLE: Aqueous binder for textile material

INVENTOR(S): Fink, Herbert; Suefke, Thomas; Kniese, Heiner

PATENT ASSIGNEE(S): Rohm G.m.b.H., Germany SOURCE: Eur. Pat. Appl., 12 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 527411	A1	19930217	EP 1992-113160	19920801 <
EP 527411	В1	19950222		

R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE PRIORITY APPLN. INFO.: DE 1991-9110054 U 19910814 <--

AB An aqueous binder for textiles contains as aqueous dispersion of a film-forming self-crosslinking emulsion polymer (A) and a polymer (B) soluble in the aqueous phase of the binder composition which is composed of 10-100% acrylamide and/or methacrylamide. The weight ratio of A to B is 95:5 to 70:30 wherein A contains 1-15% of units of N-methylolacrylamide and/or methacrylamide. This combination provides good tensile strength, especially at higher temps, with low formaldehyde emission for binder-impregnated textiles.

A binder composition comprising 90% Bu acrylate-methacrylamide-methacrylic acid-Me methacrylate-N-methylolacrylamide copolymer and 10% acrylamide-2hydroxyethyl methacrylate-methacrylamide copolymer (60:10:30) was used to impregnate a heat-reinforced polyester fiber nonwoven to give a web with tensile strength at 150° 231 N/5cm and HCHO emission 750 ppm. IC ICM D06M015-285 ICS D06M015-29 40-5 (Textiles and Fibers) CC Section cross-reference(s): 38 Binding materials ΙT (for textiles, aqueous acrylate polymer-acrylamide polymer mixts., for improved strength and reduced formaldehyde emission) 27235-04-7, Butyl acrylate-methyl methacrylate-N-methylolacrylamide ΙT 28501-56-6, Acrylamide-methacrylamide copolymer copolymer 28935-10-6 52640-90-1 57981-97-2 135090-32-3 148230-94-8 RL: USES (Uses) (aqueous binder composition containing, for reinforcing polyester nonwoven webs, with improved strength and reduced formaldehyde emissions) 52640-90-1 57981-97-2 28935-10-6 ΤТ 148230-94-8 RL: USES (Uses) (aqueous binder composition containing, for reinforcing polyester nonwoven webs, with improved strength and reduced formaldehyde emissions) 28935-10-6 CAPLUS RN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-methyl-2-propenamide (CA INDEX NAME) CM 1 CRN 923-02-4 CMF C5 H9 N O2 H2C O Me-C-C-NH-CH2-OH CM CRN 141-32-2 CMF C7 H12 O2 n-Bu0-C-CH-CH2

CM

3

CRN 80-62-6 CMF C5 H8 O2

CRN 79-39-0 CMF C4 H7 N O

RN 52640-90-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with ethyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

RN 57981-97-2 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

N-(2-hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

CM 5

CRN 79-39-0 CMF C4 H7 N O

RN 148230-94-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

CM 5

CRN 79-39-0 CMF C4 H7 N O

L95 ANSWER 37 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1991:633868 CAPLUS Full-text

DOCUMENT NUMBER: 115:233868

ORIGINAL REFERENCE NO.: 115:39873a,39876a

TITLE: Aqueous polymer dispersions useful in bitumen-based

roofing sheets

INVENTOR(S): Matejcek, Franz; Angel, Maximilian; Schuhmacher,

Rudolf

PATENT ASSIGNEE(S): BASF A.-G., Germany SOURCE: Eur. Pat. Appl., 20 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	ATENT NO	•		KINI)	DATE	AP	PLICATION NO.		DATE	
_					-						
E	P 442370			A2		19910821	EP	1991-101650		19910207	<
E	P 442370			А3		19921028					
E	P 442370			В1		19960626					
	R: Di	E, GB,	ΙΤ,	NL,	SE						
D	E 400491	5		A1		19910822	DE	1990-4004915		19900216	<
С	A 203607	l		A1		19910817	CA	1991-2036071		19910211	<
U	S 527037	5		А		19931214	US	1992-928768		19920817	<
U	S 530035	9		А		19940405	US	1993-99544		19930730	<
PRIORI	TY APPLN	. INFO	.:				DE	1990-4004915	A	19900216	<
							US	1991-655826	В1	19910215	<
							US	1992-928768	A3	19920817	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Dispersions for the title use are prepared by adding 5-60 mol% (based on CO2H groups) oxide, hydroxide, or carbonate of Mg, Ca, or Zn to 25-60% solids aqueous emulsions (average particle size 20-400 nm) of polymers from C3-5 unsatd. mono- or dicarboxylic acids and/or anhydrides 3-55 and comonomers 97-45% at temps. between the glass temperature of the polymer and 100°. A 49.4% emulsion (average particle size 170.4 nm) was prepared from Bu acrylate 1170, methacrylic acid 210, acrylonitrile 105, and acrylamidoglycolic acid 15 g and mixed (100 g) with 4.7 g (44 equiv%) ZnO paste at 25°. A nonwoven 70:30 cellulose pulp-rayon fleece (basis weight 35 g/m2) impregnated with 50% (based on solids) dispersion containing 95 parts above-described Zn-containing polymer dispersion and 5 parts bisphenol A-HCHO resol resin and dried at 170° had wet tear strength 15 N/5 cm; vs. 0 without the binder.

IC ICM C08J003-03

ICS C08L057-00; D06N005-00

CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 40, 58

IT Binding materials

(water-thinned, carboxylated acrylic polymer metal salts, for nonwoven fleeces for high wet strength)

```
ΙT
     62180-77-2P, Butyl acrylate-methacrylic acid-methyl methacrylate-styrene
     copolymer zinc salt 87706-25-0P, Butyl acrylate-methacrylic acid
     copolymer zinc salt 137295-32-0P 137295-33-1P, Acrylonitrile-butyl
     acrylate-methacrylic acid copolymer zinc salt 137295-34-2P,
     Acrylonitrile-butyl acrylate-methacrylic acid copolymer calcium salt
     137295-35-3P, Acrylonitrile-butyl acrylate-methacrylic acid copolymer
     magnesium salt
                     137295-37-5P, Acrylonitrile-butyl acrylate-methacrylic
     acid-methacrylamide copolymer zinc salt 137295-38-6P, Acrylic
     acid-acrylonitrile-butyl acrylate-methyl methacrylate copolymer zinc salt
     137295-39-7P, Acrylonitrile-butyl acrylate-methacrylic acid-vinyl acetate
     copolymer zinc salt 137295-41-1P, Acrylamidoglycolic
     acid-acrylonitrile-butyl acrylate-methacrylic acid copolymer zinc salt
     137295-43-3P, Acrylonitrile-butyl
     acrylate-N-(hydroxymethyl)methacrylamide-methacrylic acid copolymer zinc
     salt
     RL: PREP (Preparation)
        (manufacture of, for aqueous binders, for nonwoven fleeces with high wet
        strength)
     137295-43-3P, Acrylonitrile-butyl
ΙT
     acrylate-N-(hydroxymethyl)methacrylamide-methacrylic acid copolymer zinc
     RL: PREP (Preparation)
        (manufacture of, for aqueous binders, for nonwoven fleeces with high wet
        strength)
     137295-43-3 CAPLUS
RN
     2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,
CN
     N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile, zinc salt
     (9CI) (CA INDEX NAME)
     CM
         1
     CRN 137295-42-2
     CMF
         (C7 H12 O2 . C5 H9 N O2 . C4 H6 O2 . C3 H3 N)x
     CCI PMS
         CM
               2
          CRN 923-02-4
          CMF C5 H9 N O2
  H2C
 Me_C_C_NH_CH2_OH
          CM
              3
          CRN 141-32-2
          CMF C7 H12 O2
 n-BuO_C_CH__CH2
```

CRN 107-13-1 CMF C3 H3 N

 $H \ge C \longrightarrow C H \longrightarrow C \longrightarrow N$

CM 5

CRN 79-41-4 CMF C4 H6 O2

CH2 || Me_C_CO2H

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L95 ANSWER 38 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1991:585751 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 115:185751

ORIGINAL REFERENCE NO.: 115:31719a,31722a

TITLE: Aqueous polymer compositions as binders for leather

INVENTOR(S): Fischer, Karl; Weyland, Peter

PATENT ASSIGNEE(S): BASF A.-G., Germany SOURCE: Ger. Offen., 6 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA]	ENT	NO.			KINI)	DATE			API	PLICATION NO.		DATE	
	DE	4000	976			A1	_	1991	0718		DE	1990-4000976		19900116	<
	ΕP	4377	42			A1		1991	0724		ΕP	1990-124069		19901213	<
	EP	4377	42			В1		1996	0228						
		R:	ΑT,	BE,	DE,	ES,	FR,	GB,	ΙΤ,	NL					
	ΑT	1346	78			Τ		1996	0315		ΑT	1990-124069		19901213	<
	ES	2083	418			Т3		1996	0416		ES	1990-124069		19901213	<
	US	5159	000			A		1992	1027		US	1990-630194		19901219	<
	JΡ	0424	9566			A		1992	0904		JΡ	1990-406521		19901226	<
	CA	2034	181			A1		1991	0717		CA	1991-2034181		19910115	<
PRIO	RITY	Z APP	LN.	INFO	. :						DE	1990-4000976	А	19900116	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The title compns., giving leather with good wet and dry abrasion resistance, contain 5-60 parts mixture of 50-100% polymer from alkyl methacrylates 20-80, unsatd. carboxylic acids 0.5-10, and specified acrylic compds. 10-75%, 30-98% polymer from alkyl acrylates 30-98, unsatd. carboxylic acids 1-8, and specified comonomers 1-65%, and 0-50% hydrophilic polyurethane; 0.1-14% external plasticizer; and 0-20% natural and/or synthetic wax. Mixing 770 g 40% aqueous dispersion of 8.5:35:1.5:25:30 acrylic acid-Bu acrylate-N-(hydroxymethyl)acrylamide-MMA-styrene copolymer, 20 g tris(butoxyethyl)phosphate, 160 g 50% aqueous 2:13:70:2:13 acrylic acid-

acrylonitrile-Bu acrylate-methacrylamide-styrene copolymer, and 50 g 35% montan wax emulsion gave a binder composition Cattle leather was primed with a com. preparation, sprayed twice with the above composition (diluted 1:1 with H2O, dry pickup 25 g/m2), dried at 70° , and pressed at 110° to give leather with wet abrasion resistance (IUF-450) 700 revolutions. IC ICM C08L033-10 ICS C08L075-04; C08J003-05; C08J003-18; C08K005-521; C08K005-523; C14C009-02 ICA C08K005-10; C08K005-11; C08K005-12 ICI C08L033-10, C08L091-06, C08L091-08 CC 45-2 (Industrial Organic Chemicals, Leather, Fats, and Waxes) Section cross-reference(s): 38 ΙT Binding materials (acrylic polymers, for abrasion-resistant water borne finishes for leather) 25135-39-1, Acrylic acid-ethyl acrylate-methyl methacrylate copolymer 54053-24-6, Acrylic acid-acrylonitrile-butyl acrylate-methacrylamide-styrene copolymer 90077-57-9, Acrylic acid-butyl acrylate-N-(hydroxymethyl)methacrylamide-methyl methacrylate-styrene copolymer RL: USES (Uses) (binders, for aqueous finishes for abrasion-resistant leather) 90077-57-9, Acrylic acid-butyl acrylate-N-(hydroxymethyl)methacrylamide-methyl methacrylate-styrene copolymer RL: USES (Uses) (binders, for aqueous finishes for abrasion-resistant leather) 90077-57-9 CAPLUS RN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl CN 2-propenoate, ethenylbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME) CM 1 CRN 923-02-4 CMF C5 H9 N O2 H2C O Me-C-C-NH-CH2-OH CM CRN 141-32-2 CMF C7 H12 O2 n-BuO_C_CH__CH2

CM 3

CRN 100-42-5

CMF C8 H8

H2C — CH—Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L95 ANSWER 39 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1989:596706 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 111:196706

ORIGINAL REFERENCE NO.: 111:32697a,32700a

TITLE: Binders for one-bath dyeing and finishing of textiles INVENTOR(S): Penzel, Erich Dr; Schoepke, Holger; Bassing, Dieter

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 5 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3838463 PRIORITY APPLN. INFO.:	A1	19890601	DE 1988-3838463 DE 1987-3739541	19881112 < A1 19871121 <
	_	-	ntation resistance in g temperature <0°; gla	-
or dicarboxylic ac ethers with C1-4 a prepared by emulsi copolymer (I; glas	ids and lcs. 2-lon polymes temper	/or amides 0	l acrylates 60-90, α,β.3-5, N-methylol(meth) HSO3Na 0-2%, the copolith a disulfonate emulwas prepared from Buaqueous acrylamide so	acrylamide and/or ymers being sifier. A acrylate 33.6,

aqueous N-methylolmethacrylamide solution 5.22, and 25% aqueous H2C:CHSO3Na solution 1.13 kg with 1.3 kg 45% aqueous di-Na C12 alkyldiphenyl ether disulfonate solution as the emulsifier. I was used in a textile dyeing bath containing an easy-care finishing composition based on dimethylolurea, exhibiting better sedimentation resistance than a similar copolymer prepared with Na lauryl sulfate as the emulsifier.

IC ICM C08F220-18

ICS D06P001-52; D06M015-263; D06M015-248; D06M015-29; D06M015-423

ICA C08F002-26

ICI C08F220-18, C08F214-08, C08F220-04, C08F222-02, C08F220-54, C08F220-58, C08F228-02, C08F218-08, C08F218-10

CC 40-9 (Textiles and Fibers)

IT Binding materials

(acrylic polymers, in aqueous dyeing-finishing baths for textiles)

IT 123502-45-4 123502-46-5 123502-47-6 123502-48-7 123502-49-8 123502-50-1

RL: USES (Uses)

(binders, dispersible, in aqueous dyeing-finishing baths for textiles)

IT 123502-45-4 123502-47-6 123502-48-7

123502-49-8

RL: USES (Uses)

(binders, dispersible, in aqueous dyeing-finishing baths for textiles)

RN 123502-45-4 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-dichloroethene, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenamide and sodium ethenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 3039-83-6

CMF C2 H4 O3 S . Na

H2C== CH-SO3H

Na

CM 2

CRN 923-02-4 CMF C5 H9 N O2

H2C 0 Me - C - C - NH - CH2 - OH

CM 3

CRN 141-32-2 CMF C7 H12 O2

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 79-06-1 CMF C3 H5 N O

CM 6

CRN 75-35-4 CMF C2 H2 C12

$$C1-CH_2$$

RN 123502-47-6 CAPLUS

CN 2-Propenoic acid, polymer with 1,1-dichloroethene, 2-ethylhexyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 79-39-0 CMF C4 H7 N O

CM 4

CRN 79-10-7 CMF C3 H4 O2

CM 5

CRN 75-35-4 CMF C2 H2 C12

RN 123502-48-7 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, 1,1-dichloroethene, 1,1-dimethylethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenamide and sodium ethenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 3039-83-6

CMF C2 H4 O3 S . Na

H2C== CH-SO3H

Na

CM 2

CRN 1663-39-4 CMF C7 H12 O2

CM 3

CRN 923-02-4 CMF C5 H9 N O2

CM 4

CRN 141-32-2 CMF C7 H12 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

CM 6

CRN 79-06-1

CMF C3 H5 N O

CM 7

CRN 75-35-4 CMF C2 H2 C12

RN 123502-49-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,1-dichloroethene, ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 140-88-5 CMF C5 H8 O2

CRN 79-41-4 CMF C4 H6 O2

CM 5

CRN 79-06-1 CMF C3 H5 N O

CM 6

CRN 75-35-4 CMF C2 H2 C12

$$CH_{2}$$

L95 ANSWER 40 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1988:512037 CAPLUS Full-text

DOCUMENT NUMBER: 109:112037

ORIGINAL REFERENCE NO.: 109:18667a,18670a

TITLE: Nonwoven fabric with an acrylate interpolymer binder

and a process of making the nonwoven fabric

INVENTOR(S): Stanislawczyk, Vic

PATENT ASSIGNEE(S): Goodrich, B. F., Co., USA SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 264869	A2	19880427	EP 1987-115223	19871017 <
EP 264869	А3	19900214		
EP 264869	В1	19940713		

```
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE
    CA 1332901
                      С
                               19941108
                                           CA 1987-548878
                                                                  19871008 <--
    AU 8779596
                         Α
                               19880421
                                          AU 1987-79596
                                                                  19871013 <--
    AU 612600
                         В2
                               19910718
    ES 2059341
                         Т3
                               19941116
                                          ES 1987-115223
                                                                  19871017 <--
    JP 63165563
                               19880708
                                          JP 1987-261898
                                                                  19871019 <--
                         Α
    JP 2559427
                         В2
                               19961204
    CN 87107050
                         Α
                               19880629
                                          CN 1987-107050
                                                                  19871020 <--
                         В
                               19910320
    CN 1012086
PRIORITY APPLN. INFO.:
                                           US 1986-921165 A 19861020 <--
     A latex of a copolymer prepared from 1-20\% unsatd. C4-10 dicarboxylic acid and
AΒ
     70-99% copolymerizable monomers comprising mainly acrylates and having glass
     temperature -20 to -60°, hysteresis loss \leq20%, raw polymer strength \geq300 psi,
     and elongation \geq 350\% is used as a binder for nonwoven fabrics, giving bonded
     fabrics having good wet and dry strength, solvent resistance, flexibility,
     softness, and resiliency. A latex of a copolymer prepared from itaconic acid
     4.5, N-methylolacrylamide 1.0, and Bu acrylate 94.5 parts and having tensile
     strength 546 psi, elongation 553%, hysteresis loss 19.6%, and glass
     temperature -44^{\circ} was used as a binder.
IC
    ICM D04H001-64
    40-10 (Textiles and Fibers)
CC
    Section cross-reference(s): 37
ST
    binder polymer nonwoven fabric; acrylate polymer binder fabric; carboxy
    polymer binder fabric; itaconic polymer binder fabric; polyester fabric
    binder polymer; paper binder carboxy polymer; crosslinking
    polymer binder fabric; softness binder polymer fabric; methylolacrylamide
    binder fabric; acrylamide methylol binder fabric
ΙT
    Crosslinking
        (of polymeric binder on nonwoven fabric, for durability and softness)
ΙT
    Binding materials
        (polymers, nonwoven fabrics containing, durable, soft)
    53302-81-1 97700-99-7 115633-29-9
ΙT
    115633-30-2 115633-31-3 115633-32-4
    116336-07-3 116336-08-4 116336-09-5 116336-11-9
    RL: USES (Uses)
        (binder, nonwoven fabric containing, durable, soft)
    53302-81-1 97700-99-7 115633-29-9
ΤТ
    115633-30-2 115633-31-3
                               115633-32-4
    116336-09-5 116336-11-9
    RL: USES (Uses)
        (binder, nonwoven fabric containing, durable, soft)
    53302-81-1 CAPLUS
RN
CN
    Butanedioic acid, 2-methylene-, polymer with butyl 2-propenoate (CA INDEX
    NAME)
    CM
         1
    CRN 141-32-2
    CMF C7 H12 O2
 n-BuO_C_CH__CH2
```

$$\begin{matrix} & \text{CH2} \\ \text{II} \\ \text{HO2C--} \\ \text{C---} \\ \text{CH2---} \\ \text{CO2H} \end{matrix}$$

RN 97700-99-7 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 97-65-4 CMF C5 H6 O4

RN 115633-29-9 CAPLUS

CN 2-Butenedioic acid (2E)-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 110-17-8 CMF C4 H4 O4

Double bond geometry as shown.

RN 115633-30-2 CAPLUS

CN 2-Butenedioic acid (2Z)-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$n-BuO-C-CH$$
 CH2

CRN 110-16-7 CMF C4 H4 O4

Double bond geometry as shown.

RN 115633-31-3 CAPLUS

CN 2-Butenedioic acid, 2-methyl-, (Z)-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CM 2

CRN 498-23-7 CMF C5 H6 O4

Double bond geometry as shown.

CM 3

CRN 141-32-2 CMF C7 H12 O2

RN 115633-32-4 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 97-65-4 CMF C5 H6 O4

RN 116336-09-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with N-(hydroxymethyl)-2-propenamide and methylenebutanedioic acid (9CI) (CA INDEX NAME)

CM 1

CRN 924-42-5 CMF C4 H7 N O2

CM 2

CRN 97-65-4 CMF C5 H6 O4

$$\begin{array}{c} \text{CH2} \\ \text{HO2C--} \\ \text{C---} \\ \text{CH2---} \\ \text{CO2H} \end{array}$$

CRN 80-62-6 CMF C5 H8 O2

RN 116336-11-9 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate and N-(methoxyacetyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 116336-10-8 CMF C6 H9 N O3

$$MeO-CH2-U-NH-U-CH2-CH-CH2$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 97-65-4 CMF C5 H6 O4

$$\begin{array}{c} \text{CH2} \\ \text{HO2C--} \\ \text{C---} \\ \text{CH2---} \\ \text{CO2H} \end{array}$$

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 41 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1987:638549 CAPLUS Full-text DOCUMENT NUMBER: 107:238549

ORIGINAL REFERENCE NO.: 107:38331a,38334a

TITLE: Binders for inorganic fibers

INVENTOR(S): Izumibayashi, Masuji; Sagara, Masanori; Arita,

Yoshihiro

PATENT ASSIGNEE(S): Nippon Shokubai Kagaku Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATE	ENT NO.	KIND	DATE	APPLICATION NO.	. DATE
JP 6	52170567	A	19870727	JP 1986-8157	19860120 <
PRIORITY	APPLN. INFO.:			JP 1986-8157	19860120 <
7. D 141 - +	or-registant b	indora	for inorg	fiber pergarana ar	a proposed by modify:

- Water-resistant binders for inorg. fiber nonwovens are prepared by modifying AB polyamines and/or their derivs. with R1(OZ)nR (R1 = C4-28 hydrocarbon group; Z = C2-4 alkylene; R = epoxy or isocyanate-containing mol. group, halogen; n = 0-30) and epichlorohydrin and emulsion polymerizing monomers having functional groups reactable with the modified polyamines (A) over A as emulsifiers. Thus, 45 parts Epomine SP 012 was treated with 29.2 parts Softnaol 30 glycidyl ether for 2 h at 80° under N to give a product, which was treated with 97.2 parts epichlorohydrin for 3 h at 80° to give a modified polyamine (I). Then, 175.7 parts H2O and 4.8 parts aqueous 10% 2,2'-azobis(2-methylpropanediamine) were stirred at 55° , and an emulsion containing methacrylic acid 8, Me methacrylate 4, Et acrylate 148, aqueous 35.6% (nonvolatiles) I 34.5, and H2O 56.2 parts was added dropwise to the solution in 2 h at $55-60^{\circ}$ held at $50-60^{\circ}$, and stirred and polymerized 1 h to give a water-borne polymer (II). A glass fiber web was prepared, immersed in aqueous 6% (nonvolatiles) II dispersion, squeezed to binder content 5% (solids), and dried to give a 100-g/m2 nonwoven web with tensile strength $4.3~\mathrm{kg/cm2}$ and $3.8~\mathrm{kg/cm2}$ (after immersion in H2O for 10 min at 20°), vs. 2.5 kg/cm2 and 1.0 kg/cm2, resp., using dodecyltrimethylammonium chloride instead of II.
- IC ICM D04H001-58

ICS C08F002-24; D04H001-42

- ICA D06M015-61
- CC 40-10 (Textiles and Fibers)
- ST water resistant binder glass nonwoven; inorg nonwoven binder acrylate polymer; polyamine crosslinked acrylate polymer binder
- IT Binding materials

((meth)acrylic polymers crosslinked with polyamines modified with epoxy compds. and epichlorohydrin as, water-resistant, for inorg. fiber nonwoven webs)

IT Glass fibers, uses and miscellaneous

RL: USES (Uses)

(binders for, (meth)acrylic polymers crosslinked with polyamines modified with epoxy compds. and epichlorohydrin as, water-resistant)

25133-97-5D, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer, polymers with polyamines modified with epichlorohydrin and epoxy compds. 30261-69-9D, Butyl acrylate-glycidyl methacrylate-methyl methacrylate copolymer, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-03-6D, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-04-7D, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-05-8D, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-06-9D, polymers with polyamines modified with epichlorohydrin and epoxy compds. RL: USES (USES)

(binders, water-resistant, for inorg. fiber nonwoven webs) ΙT 25133-97-5D, Ethyl acrylate-methacrylic acid-methyl methacrylate copolymer, polymers with polyamines modified with epichlorohydrin and epoxy compds. 30261-69-9D, Butyl acrylate-glycidyl methacrylate-methyl methacrylate copolymer, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-03-6D, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-05-80, polymers with polyamines modified with epichlorohydrin and epoxy compds. 111804-06-9D, polymers with polyamines modified with epichlorohydrin and epoxy compds. RL: USES (Uses) (binders, water-resistant, for inorg. fiber nonwoven webs) 25133-97-5 CAPLUS RN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate and methyl CN 2-methyl-2-propenoate (CA INDEX NAME) CM 1 CRN 140-88-5 CMF C5 H8 O2 Et.O_C_CH__CH2 СМ 2 CRN 80-62-6 CMF C5 H8 O2 H2C CM 3 CRN 79-41-4 CMF C4 H6 O2 CH₂ Me_C_CO2H 30261-69-9 CAPLUS RN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM

1

CRN 141-32-2 CMF C7 H12 O2

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2-\circ-}\overset{\circ}{\Vdash}\overset{\text{CH}_2}{\Vdash}_{\text{C}-\text{Me}}$$

CM 3

CRN 80-62-6 CMF C5 H8 O2

RN 111804-03-6 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0 CMF C10 H20 O5 Si

$$\begin{array}{c|c} \text{H2C} & \text{O} \\ \text{Me} & \text{C} & \text{C} & \text{O} & \text{(CH2)} \\ \text{Me} & \text{Si} & \text{OMe} \\ \\ \text{OMe} & \text{OMe} \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CRN 79-10-7 CMF C3 H4 O2

RN 111804-05-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenyltrimethoxysilane and ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2768-02-7 CMF C5 H12 O3 Si

$$\texttt{MeO-Si-CH} = \texttt{CH}_2$$

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 79-41-4 CMF C4 H6 O2

RN 111804-06-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, methyl 2-methyl-2-propenoate and 3-(triethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CRN 21142-29-0 CMF C13 H26 O5 Si

$$\begin{array}{c|c} \text{H2C} & \text{O} & \text{OEt} \\ \text{Me} & \text{C} & \text{C} & \text{O} & \text{(CH2)} \\ \text{3} & \text{Si} & \text{OEt} \\ \end{array}$$

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 42 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1987:178063 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 106:178063

ORIGINAL REFERENCE NO.: 106:28901a,28904a

TITLE: Binders for pigment printing of textiles

INVENTOR(S): Schmidt-Thuemmes, Juergen; Uhl, Guenter; Schoepke,

Holger

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 5 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				_	
DE 3525799	A1	19870122	DE 1985-3525799		19850719 <
EP 209029	A1	19870121	EP 1986-109207		19860705 <
EP 209029	B1	19881130			
R: AT, BE, CH,	DE, FR	, GB, IT, LI	, NL, SE		
AT 39005	T	19881215	AT 1986-109207		19860705 <
DK 8603422	A	19870120	DK 1986-3422		19860718 <
PRIORITY APPLN. INFO.:			DE 1985-3525799	Α	19850719 <
			EP 1986-109207	Α	19860705 <

AΒ Self-crosslinking binders in the form of an emulsion polymerizate for pigment printing of textiles comprise butadiene and/or isoprene 10-70, C8-18 alkyl esters of (meth)acrylic acid 10-50, acrylonitrile and/or styrene 10-40, Nmethylolacrylamide, N-methylolmetharylamide and/or their C1-4 alkyl ethers 0.5-10, and copolymerizable monoethylenically unsatd. compds. 0-5%. A stable latex (44%) was prepared from butadiene 5.0 2-ethylhexyl acrylate 2.5, acrylonitrile 2.5, and N-methylolmethacrylamide 0.5 kg by free radical polymerization and used as a binder in a variety of Cu phthalocyanine printing pastes containing hydrocarbons, no hydrocarbons, or little hydrocarbons and showed high printing paste viscosities in all applications whereas binders prepared from C≤6-alkyl acrylates showed lowered print paste viscosities..

IC ICM C08F236-04

ICS C08F220-18; C08F220-44; C08F220-58; C09D003-36; C09D003-80

- CC 40-6 (Textiles and Fibers)
- Textile printing ΙT

(pigment, self-crosslinking binders for)

Binding materials ΙT

(self-crosslinking, for pigment printing)

78-79-5D, polymers with acrylic acid derivs. 79-10-7D, Acrylic acid, esters, polymers with butadienes 100-42-5D, polymers with butadiene and ΙT methylol(meth)acrylamide 103-11-7D, polymers with butadiene and methylol(meth)acrylamide 106-99-0D, Butadiene, polymers with acrylic 107-13-1D, Acrylonitrile, polymers with butadienes acid derivs. 923-02-4D, N-Methylolmethacrylamide, polymers with butadienes N-Methanolacrylamide, polymers with butadienes 2156-97-0D, Lauryl acrylate, polymers with butadiene and methylol(meth)acrylamide 4813-57-4D, Stearyl acrylate, polymers with butadiene and methylol(meth)acrylamide 25135-82-4 108144-02-1 108144-04-3 108144-03-2

RL: USES (Uses)

(binders, for textile printing paste)

108144-02-1 108144-03-2 108144-04-3 ΙT

RL: USES (Uses)

(binders, for textile printing paste)

108144-02-1 CAPLUS RN

2-Propenoic acid, 2-ethylhexyl ester, polymer with 1,3-butadiene, CN N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CRN 107-13-1 CMF C3 H3 N

$$H \supseteq C \longrightarrow C H \longrightarrow C \longrightarrow N$$

CM 3

CRN 106-99-0 CMF C4 H6

$$H \ge C \longrightarrow C H \longrightarrow C H \longrightarrow C H \ge$$

CM 4

CRN 103-11-7 CMF C11 H20 O2

RN 108144-03-2 CAPLUS

CN 2-Propenoic acid, octadecyl ester, polymer with 1,3-butadiene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 4813-57-4 CMF C21 H40 O2

$$H \ge C \longrightarrow C H \longrightarrow C \longrightarrow N$$

RN 108144-04-3 CAPLUS

CN 2-Propenoic acid, dodecyl ester, polymer with 1,3-butadiene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

```
 \overset{\text{H2C}}{\underset{\text{Me}}{\overset{\text{C}}{=}}} \overset{\text{O}}{\underset{\text{C}}{\overset{\text{NH}}{=}}} \overset{\text{CH2C}}{\underset{\text{C}}{\overset{\text{C}}{=}}} \overset{\text{O}}{\underset{\text{NH}}{\overset{\text{CH2C}}{=}}} \overset{\text{O}}{\underset{\text{C}}{\overset{\text{C}}{=}}} \overset{\text{C}}{\underset{\text{C}}{\overset{\text{C}}{=}}} \overset{\text{O}}{\underset{\text{C}}{\overset{\text{C}}{=}}} \overset{\text{C}}{\underset{\text{C}}{\overset{\text{C}}{=}}} \overset{\text{C}}{\underset{\text{C}}{\overset{\text{C}}{\xrightarrow{C}}}} \overset{\text{C}}{\underset{\text{C}}{\overset{\text{C}}{\overset{C}}{\overset{C}}}} \overset{\text{C}}{\underset{\text{C}}{\overset{C}}} \overset{\text{C}}{\underset{\text{C}}{\overset{C}}} \overset{\text{C}}{\underset{\text{C}}} \overset{\text{C}}{\underset{\text{C}}} \overset{\text{C}}{\underset{\text{C}}}} \overset{\text{C}}{\underset{\text{C}}} \overset{\text{C}}} \overset{\text{C}}} \overset{\text{C}}{\underset{\text{C}}} \overset{\text{C}}{\underset{\text{C}}} \overset{\text{C}}{\underset{\text{C}}
```

CRN 107-13-1 CMF C3 H3 N

H 2 C === C H == C === N

CM 4

CRN 106-99-0 CMF C4 H6

H 2 C === C H === C H 2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L95 ANSWER 43 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1986:609787 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 105:209787

ORIGINAL REFERENCE NO.: 105:33841a,33844a

TITLE: Core-shell emulsion polymerization

AUTHOR(S): Kong, Xiaoxing; Huang, Jiande; Zhou, Hong CORPORATE SOURCE: Chinese Textile Univ., Peop. Rep. China Huaxue Shijie (1986), 27(8), 344-7

CODEN: HUAKAB; ISSN: 0367-6358

DOCUMENT TYPE: Journal LANGUAGE: Chinese

AB Core-shell polymer emulsions were prepared by 2-stage emulsion polymerization In the 1st stage, Me acrylate, Bu acrylate, and Me methacrylate were polymerized to prepare a core emulsion. In the 2nd stage, acrylic acid, styrene, and N-hydroxymethylacrylamide were added to the core emulsion and polymerized to give core-shell emulsions. The structure of these structures were studied by SEM. These polymers showed good thermal stability and film forming properties. They were useful as binders for textile printing.

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 40

IT Binding materials

(core-shell vinyl polymers, for textile printing)

IT 90077-57-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by core-shell emulsion polymerization, as binders for textile $% \left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}{2}$

printing)

IT 90077-57-9P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, by core-shell emulsion polymerization, as binders for textile $\ensuremath{\mathsf{E}}$

printing)

RN 90077-57-9 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, ethenylbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

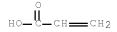
CRN 100-42-5 CMF C8 H8

CM 4

CRN 80-62-6 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2



L95 ANSWER 44 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1986:446363 CAPLUS Full-text

DOCUMENT NUMBER: 105:46363

ORIGINAL REFERENCE NO.: 105:7619a,7622a

TITLE: Electrically conductive coating composition of a

glycidyl acrylic polymer and a reactive polysiloxane

INVENTOR(S): Vasta, Joseph A.

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co., USA

SOURCE: U.S., 5 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT N	.01			KIND		DATE		API	PLICATION NO.		DATE	
	US	45899	99			 A		1986	0520	US	 1984-687361		19841228	<
	EP	18965	3			A2		1986	0806	EP	1985-308791		19851203	<
	EP	18965	3			A3		1987	0527					
		R:	BE,	DE,	FR,	GB,	ΙΤ,	NL,	SE					
	CA	12587	25			A1		1989	0822	CA	1985-497826		19851217	<
	DK	85060	34			А		1986	0629	DK	1985-6034		19851223	<
	NO	85052	67			А		1986	0630	ИО	1985-5267		19851223	<
	AU	85516	06			А		1986	0703	AU	1985-51606		19851223	<
	AU	57700	3			В2		1988	0908					
	BR	85065	23			A		1986	0909	BR	1985-6523		19851226	<
	JР	61162	566			A		1986	0723	JP	1985-293394		19851227	<
RIC	RITY	APPL	N.	INFO	. :					US	1984-687361	A	19841228	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

A coating composition has 20-90 liquid carrier, 10-80 weight% binder, and elec. conductive pigments such as carbon black and graphite in a pigment binder weight ratio of .apprx.(50-300):100. The binder is a blend of 20-90 acrylic polymer containing glycidyl groups and 10-80 weight% crosslinkable polysiloxane having attached to the Si atoms of its backbone C1-66 alkyl groups, Ph groups, and hydroxyl groups. A dry film of the $25-\mu$ coating has an elec. resistance of 5-20 Ω . The coating is used on Pb-alloy grids of Pb-acid batteries to prolong the life of the battery or to decrease the size land weight of the battery. Thus, a Pb-Cu alloy and a Pb-Sb alloy grid were 1st coated with a 2% solution of δ -amino propyltrimethoxysilane; dried; sprayed with a coating composition containing acrylic resin solution, a polysiloxane, δ -glycidoxyypropyltrimethoxysilane, carbon black, finely divided graphite, PhMe, MeOH, and acetylacetone; and baked at .apprx.65° for .apprx.1. The resulting .apprx. $40-\mu$ film had an excellent adhesion to the alloy grids. When immersed in n H2SO4 and held at 2.3 V for 4 wk, the coating did not blister or deteriorate and no corrosion of the grid was noted, but uncoated grids exposed under the same conditions corroded severely.

IC ICM H01B001-24

INCL 252511000

PR

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 38

IT Electrodes

(battery, grids for, glycidyl acrylic polymer-coated)

IT 38639-71-3

RL: USES (Uses)

(electrode grids coated with, for lead-acid batteries)

IT 38639-71-3

RL: USES (Uses)

(electrode grids coated with, for lead-acid batteries)

RN 38639-71-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-oxiranylmethyl 2-methyl-2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 106-91-2 CMF C7 H10 O3

CM 3

CRN 100-42-5 CMF C8 H8

CM 4

CRN 97-88-1 CMF C8 H14 O2

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD

(4 CITINGS)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 45 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1985:454909 CAPLUS Full-text

DOCUMENT NUMBER: 103:54909

ORIGINAL REFERENCE NO.: 103:8861a,8864a

TITLE: Polyfunctional aziridine crosslinking agents

for aqueous magnetic recording media binder

INVENTOR(S): Pendergrass, Daniel B., Jr.

PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

SOURCE: U.S., 8 pp. Cont.-in-part of U.S. Ser. No. 141,060,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4490505	 A	19841225	US 1981-240265	19810316 <
BR 8102331	A	19811215	BR 1981-2331	19810415 <
JP 56163130	A	19811215	JP 1981-56378	19810416 <
JP 03049944	В	19910731		
RITY APPLN. INFO.:			US 1980-141060	A2 19800417 <

PRIORITY APPLN. INFO.: US 1980-141060 A2 198 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A dispersion of magnetizable particles in a water-thinned polymer having active H, epoxy, or epithio groups is mixed with a crosslinking agent comprising a polyfunctional aziridine derivative and coated onto a backing material such as a polyester film to prepare a magnetic recording medium. In some cases, similar dispersions containing nonmagnetizable particles are also coated on the backing material. The method eliminates the use of organic solvents and gives coated backing materials having good blocking resistance. Thus, 100 parts iron oxide particles containing a dispersant 2, Me2NCH2CH2OH 2, and H2O 120 parts were mixed with 75 parts of an emulsion containing 33.5% copolymer prepared from Bu acrylate 60, Me methacrylate 20, 2-hydroxyethyl acrylate 15, and methacrylic acid 5 parts, mixed with 2.6 parts
EtC(CH2O2CCH2CH2R)3 (R = methylaziridino) [52234-82-9] and 3 parts fatty ester (lubricant), filtered, degassed, coated on a plasma-treated poly(ethylene terephthalate) [25038-59-9] film, oriented magnetically in the longitudinal direction, and dried 120 s at .apprx.90° to prepare a magnetic recording tape.

IC ICM C08L075-04 ICS B05D005-12

INCL 524591000

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 42

ST aziridine crosslinking aq binder; binder aq magnetic tape; acrylic binder aq crosslinking; polyester magnetic tape binder; iron oxide binder crosslinking

IT Binding materials

(aqueous dispersions of, for magnetic tape manufacture, crosslinking agents for)

IT Crosslinking agents

(aziridines, for aqueous binders, in magnetic tape manufacture)

 IT
 9010-77-9
 25230-94-8
 30174-67-5
 65339-94-8
 66331-20-2

 66988-70-3
 80892-80-4
 80893-64-7
 80941-02-2
 80941-36-2

95795-66-7 105681-87-6

RL: USES (Uses)

(aqueous binders containing, aziridines for crosslinking of)

IT 7652-64-4 7722-73-8 52234-82-9 57116-46-8 80873-37-6

RL: MOA (Modifier or additive use); USES (Uses)

(crosslinking agents, for aqueous binders in magnetic tape manufacture)

IT 1309-37-1, properties

RL: PRP (Properties)

(magnetic coatings of, aqueous binders for, crosslinking agents for)

IT 25230-94-8 95795-66-7

RL: USES (Uses)

(aqueous binders containing, aziridines for crosslinking of)

RN 25230-94-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

2-hydroxyethyl 2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX

NAME)

CM 1

CRN 818-61-1

CMF C5 H8 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

RN 95795-66-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 2-hydroxyethyl 2-propenoate, methyl 2-methyl-2-propenoate and oxiranylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 818-61-1 CMF C5 H8 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{ \smile}_{\text{CH}_2-\circ-}\overset{\circ}{\underset{\text{C}-\text{Me}}{\parallel}}\overset{\text{CH}_2}{\underset{\text{C}-\text{Me}}{\parallel}}$$

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c}
\text{H2C} \\
\text{Me}
\end{array}$$

CRN 79-41-4 CMF C4 H6 O2

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD

(6 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L95 ANSWER 46 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1983:523608 CAPLUS Full-text

DOCUMENT NUMBER: 99:123608

ORIGINAL REFERENCE NO.: 99:19049a,19052a

TITLE: Self-crosslinking aqueous polymer dispersion

INVENTOR(S): Fink, Herbert; Suetterlin, Norbert; Huebner, Klaus;

Siol, Werner; Tilch, Willi

PATENT ASSIGNEE(S): Rohm G.m.b.H., Fed. Rep. Ger.

SOURCE: Ger. Offen., 16 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	TENT NO.			KINI)	DATE	API	PLICATION NO.		DATE	
						_	10000000		1001 0145005		10011107	
	DE	3147007			A1		19830609	DE	1981-3147007		19811127	<
	DE	3147007			C2		19831006					
	ΕP	80635			A2		19830608	EP	1982-110514		19821115	<
	ΕP	80635			А3		19830706					
	ΕP	80635			В1		19861112					
		R: DE,	FR,	GB,	NL,	SE						
	US	4473678			A		19840925	US	1982-441602		19821115	<
	JP	58103545			Α		19830620	JP	1982-204708		19821124	<
	JΡ	02049337			В		19901029					
)F	RIT	APPLN.	INFO.	:				DE	1981-3147007	A	19811127	<

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Dispersions of copolymers prepared from H2C:CRCONHCH2OH (R = H or Me), a hydroxyalkyl ester of an α , β -unsatd. mono- or dicarboxylic acid, and other monomers such as acrylate esters, vinyl esters, and styrene are mixed with 0,2-5% urea [57-13-6], which inhibits the release of HCHO from the copolymers. The crosslinkable copolymers are useful as textile binders, etc. The urea has little effect on the rate of dissoln. of the crosslinked copolymers in solvents such as C12C:CHC1 and iso-BuCOMe. Thus, a copolymer dispersion was prepared by emulsion polymerization of Me methacrylate 200, Bu acrylate 144, N-methylolmethacrylamide 16, 2-hydroxyethyl acrylate (I) 20, methacrylamide 12, methacrylic acid 4, and ethylene glycol dimethacrylate 4 parts and mixed with 3% urea (based on solids). The loss of HCHO from the copolymer [87097-16-3] during 15 min at 140° was 0.009%, compared with 0.154% for a dispersion containing no urea. The omission of I from the copolymer decreases the solvent resistance of the urea-containing, crosslinked copolymer.

IC C08L033-08; C08L033-10; C08L033-26; C08L031-02; C08L025-04; C08J003-06 CC 37-6 (Plastics Manufacture and Processing) ΙT Binding materials (methylolmethacrylamide copolymers, containing urea as formaldehyde acceptor) ΙT Crosslinking (of methylolmethacrylamide copolymers, urea as formaldehyde acceptor 87097-16-3 87097-17-4 87097-18-5 ΙT 87097-19-6 87097-20-9 RL: USES (Uses) (formaldehyde acceptor for, urea as) 87097-17-4 87097-18-5 87097-16-3 ΙT 87097-19-6 RL: USES (Uses) (formaldehyde acceptor for, urea as) RN 87097-16-3 CAPLUS CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), 2-hydroxyethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, methyl 2-methyl-2-propenoate and2-methyl-2-propenamide (9CI) (CA INDEX NAME) CM 1 CRN 923-02-4 CMF C5 H9 N O2 H2C O Me—C—C—NH—CH2—OH CM CRN 818-61-1 CMF C5 H8 O3 HO-CH2-CH2-CM 3 CRN 141-32-2 CMF C7 H12 O2 n-BuO_C_CH__CH2

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-41-4 CMF C4 H6 O2

CM 7

CRN 79-39-0 CMF C4 H7 N O

RN 87097-17-4 CAPLUS

CN Butanedioic acid, methylene-, polymer with ethyl 2-propenoate, 2-hydroxyethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {}^{\rm H2C} {}^{\rm C} {}^{\rm O} \\ {}^{\rm Me} {}^{\rm C} {}^{\rm C} {}^{\rm C} {}^{\rm C} {}^{\rm NH} {}^{\rm CH} {}^{\rm 2} {}^{\rm C} {}^{\rm OH} \end{array}$$

CRN 818-61-1 CMF C5 H8 O3

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 97-65-4 CMF C5 H6 O4

$$\begin{array}{c} \begin{array}{c} \text{CH2} \\ \text{HO2C-C-CH2-CO2H} \end{array}$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

RN 87097-18-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-propenyl ester, polymer with butyl 2-propenoate, ethenylbenzene, 4-hydroxybutyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

RN 87097-19-6 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with 4-hydroxybutyl 2-propenoate

and N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 2478-10-6 CMF C7 H12 O3

CM 2

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {\rm H2C} & {\rm O} \\ {\rm He} & {\rm U} \\ {\rm Me} - {\rm C} - {\rm C} - {\rm NH-CH}_2 - {\rm OH} \end{array}$$

CM 3

CRN 140-88-5 CMF C5 H8 O2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L95 ANSWER 47 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1981:210265 CAPLUS Full-text

DOCUMENT NUMBER: 94:210265

ORIGINAL REFERENCE NO.: 94:34401a,34404a TITLE: Nonwoven fabrics

INVENTOR(S): Warburton, Charles Edward, Jr.

PATENT ASSIGNEE(S): Rohm and Haas Co., USA SOURCE: Eur. Pat. Appl., 52 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 21693	A1	19810107	EP 1980-301922	19800609 <
EP 21693	В1	19841003		
R: BE, DE, FR,	GB, IT	, NL, SE		

```
US 4291087
                       A
                               19810922
                                          US 1979-47839
                                                                  19790612 <--
    ZA 8003460
                        Α
                               19810729
                                          ZA 1980-3460
                                                                  19800610 <--
    CA 1139260
                        A1
                               19830111
                                          CA 1980-353663
                                                                  19800610 <--
    JP 56043458
                         Α
                               19810422
                                           JP 1980-78870
                                                                  19800611 <--
PRIORITY APPLN. INFO.:
                                           US 1979-47839
                                                               A 19790612 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
     Nonwoven fabrics, preferably based on hydrophobic fibers such as polyesters
     and polyolefins, are manufactured using a hydrophobic binder consisting of
     polymers from unsatd. monomers and having mol. wts. 50,000-10,000,000, glass
     temperature of -60^{\circ} to +40^{\circ}, and being free of ethylenic unsatn.,
     photosensitive groups, or crosslinking agents. The binder-containing fiber
     mass is dried above the glass temperature of the polymer and exposed to a
     radiation source to cure the polymer chains to give a nonwoven fabric
     resistant to dry cleaning solvents and laundering and having high wet
     strength. Thus, polypropylene carded web having d. 25 \text{ g/m2} and prepared from
     3 denier fibers having length 38 mm was treated with a 66:34 Bu acrylate-
     styrene copolymer [25767-47-9] binder to dry add on 40.0%, dried 15 min at
     60° in a forced air oven, and cured by passing 6 times at 60 ft/min under 2 80
     W/m Hg vapor lamps to give a fabric having dry tensile strength 189 \pm 4 \text{ N/m},
     wet tensile strength 112 \pm 9 N/m, and capable of surviving 8 wash cycles.
    D04H001-64A
IC
CC
    39-11 (Textiles)
    Electron beam, chemical and physical effects
ΙT
        (crosslinking by, of hydrophobic polymer binders on
       hydrophobic nonwoven textiles)
ΙT
    Binding materials
        (hydrophobic radiation-curable polymers, for hydrophobic nonwoven
       textiles)
    Crosslinking
IT
        (radiochem., of hydrophobic polymer binders on hydrophobic nonwoven
       textiles)
    25085-19-2 25586-20-3 25686-45-7
ΙT
    25767-47-9
                26745-19-7 40893-50-3
                                          65379-26-2
    68156-21-8
                 76348-61-3
                              76348--62--4
                 77729-76-1
    76397-94-9
                              77729--77--2
                77729-79-4 77729-80-7
    77729-78-3
    77729-81-8 77729-82-9
    RL: USES (Uses)
        (binders, radiation-curable, for hydrophobic nonwoven textiles)
    25322-25-2
ΙT
                 25586-20-3 25852-37-3
    77729-83-0
    RL: USES (Uses)
        (binders, radiation-curable, for rayon nonwoven fabrics)
ΙT
    25085-19-2 25586-20-3 25686-45-7
    26745-19-7 40893-50-3 68156-21-8
    76348-61-3 76348-62-4 76397-94-9
    77729-76-1 77729-77-2
                            77729-78-3
    77729-79-4
                77729-80-7 77729-81-8
    77729-82-9
    RL: USES (Uses)
        (binders, radiation-curable, for hydrophobic nonwoven textiles)
RN
    25085-19-2 CAPLUS
CN
    2-Propenoic acid, polymer with ethenylbenzene and 2-ethylhexyl
    2-propenoate (CA INDEX NAME)
    CM
         1
    CRN 103-11-7
    CMF C11 H20 O2
```

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 25586-20-3 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

RN 25686-45-7 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 107-13-1 CMF C3 H3 N

H2C = CH-C = N

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 26745-19-7 CAPLUS

CN Butanedioic acid, 2-methylene-, polymer with butyl 2-propenoate and ethenylbenzene (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

CM 3

CRN 97-65-4 CMF C5 H6 O4

RN 40893-50-3 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with N-(hydroxymethyl)-2-methyl-2-propenamide and 2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

CRN 79-39-0 CMF C4 H7 N O

RN 68156-21-8 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenylmethylbenzene (CA INDEX NAME)

CM 1

CRN 25013-15-4 CMF C9 H10 CCI IDS



D1**-** Me

D1-CH-CH2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 76348-61-3 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CRN 76348-57-7 CMF C17 H14 O3

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 76348-62-4 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with ethenylbenzene, 2-ethylhexyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CRN 103-11-7 CMF C11 H20 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 76397-94-9 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-propenoate, ethenylbenzene, ethenylmethylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

$$\begin{array}{c} \overset{\circ}{\underset{\text{C-Ph}}{\text{Ph}}} \\ \overset{\circ}{\underset{\text{C-O-CH}_2-CH}{\text{CH}_2}} \\ \overset{\circ}{\underset{\text{Ch}_2}{\text{CH}_2}} \end{array}$$

CRN 25013-15-4 CMF C9 H10 CCI IDS



D1**--** Me

D1-CH-CH2

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8

H 2 C === C H -- P h

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 77729-76-1 CAPLUS

CN 2-Propenoic acid, polymer with ethenylbenzene and 1-methylpropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2998-08-5 CMF C7 H12 O2

CM 2

CRN 100-42-5 CMF C8 H8

$$H_2C \longrightarrow CH - Ph$$

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 77729-77-2 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with 1-methylpropyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CRN 2998-08-5 CMF C7 H12 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 77729-78-3 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-propenoate, ethenylbenzene, ethyl 2-methyl-2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 4

CRN 97-63-2 CMF C6 H10 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 77729-79-4 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with butyl 2-methyl-2-propenoate, butyl 2-propenoate, ethenylbenzene and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

$$H2C \longrightarrow CH \longrightarrow Ph$$

CM 4

CRN 97-88-1 CMF C8 H14 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 77729-80-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-, polymer with butyl 2-propenoate and 2-propenoic acid (9CI) (CA

INDEX NAME)

CM 1

CRN 7534-94-3 CMF C14 H22 O2

Relative stereochemistry.

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 77729-81-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,7,7-trimethylbicyclo[2.2.1]hept-2-yl ester, exo-, polymer with butyl 2-propenoate, 2-propenoic acid and 2-propenyl 2-benzoylbenzoate (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

$$\begin{array}{c} \overset{\circ}{\underset{\text{C-Ph}}{\text{Ph}}} \\ \overset{\circ}{\underset{\text{C-O-CH}_2-CH}{\text{CH}_2}} \\ \overset{\circ}{\underset{\text{Ch}_2}{\text{CH}_2}} \end{array}$$

CRN 7534-94-3 CMF C14 H22 O2

Relative stereochemistry.

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 77729-82-9 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

RL: USES (Uses) (binders, radiation-curable, for rayon nonwoven fabrics) RN 25322-25-2 CAPLUS 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-propenoic acid CN (CA INDEX NAME) CM 1 CRN 80-62-6 CMF C5 H8 O2 H2C CM 2 CRN 79-10-7 CMF C3 H4 O2 HO_C_CH__CH2 25586-20-3 CAPLUS RN 2-Propenoic acid, polymer with butyl 2-propenoate and ethenylbenzene (CA CN INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 n-BuO_C_CH__CH2 CM 2 CRN 100-42-5 CMF C8 H8 $H2C \longrightarrow CH - Ph$

3 CRN 79-10-7

CM

CMF C3 H4 O2

RN 77729-83-0 CAPLUS

CN Benzoic acid, 2-benzoyl-, 2-propenyl ester, polymer with ethenylbenzene, ethyl 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 76348-57-7 CMF C17 H14 O3

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH - Ph$

CM 4

CRN 79-10-7 CMF C3 H4 O2 HO_C_CH__CH2

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L95 ANSWER 48 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1981:32147 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 94:32147

ORIGINAL REFERENCE NO.: 94:5297a,5300a

TITLE: Coating, impregnating and binding agent based on an

aqueous dispersion of copolymers exhibiting epoxy

groups

INVENTOR(S): Czauderna, Bernhard; Einwiller, Andreas; Wendel, Kurt

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 12 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PA:	TENT	NO.			KINI)	DATE		APE	PLICAT	CION NO.			DATE	
		2918 1916				A1 A1	_	1980: 1980:				 -291882 ⁻ -102381	7	_	19790510 19800502	
	EP	1916	1			В1		1983	0413							
		R:	ΑT,	BE,	CH,	DE,	FR,	, GB,	ΙΤ,	LU, NI	L, SE					
	JΡ	5515	1025			A		1980	1125	JP	1980-	-59550			19800507	<
	JP	0100	2620			В		1989	0118							
RIO	RIT	Y APP	LN.	INFO	. :					DE	1979-	-291882	7	Α	19790510	<

The title compns., which are storage-stable and give off no HCHO in use, contain 6-membered (hetero)cyclic compds. containing 2-4 (dimethylamino)alkyl groups. Thus, a latex containing .apprx.600 parts 288:43:288 Et acrylate-glycidyl acrylate-vinyl acetate copolymer [76091-23-1] and 16 parts C6H3(CH2NMe2)3 [76091-38-8] is diluted to 15% solids. A carded fleece (40 g/m2) of 60:40 3.3-denier polyamide-polyester fibers (length 50 and 40 mm, resp.) is impregnated with this binder, squeezed, and dried 6 min at 150° to give a 3:1 fiber-binder fleece with excellent resistance to dry cleaning, e.g. by C2C14.

- IC C09D003-58; D06M015-30
- CC 39-11 (Textiles)
- ST binder textile nonwoven; glycidyl acrylate copolymer binder; catalyst crosslinking binder; amine catalyst crosslinking; vinyl acetate copolymer binder
- IT Crosslinking catalysts

IT Binding materials

(glycidyl acrylate copolymers, for nonwoven fabrics, formaldehyde-free)

IT 27274-54-0 41259-37-4 76091-23-1

RL: USES (Uses)

(binders, formaldehyde-free, for nonwoven textiles)

IT 15875-13-5 76091-38-8 76091-96-8

RL: CAT (Catalyst use); USES (Uses)

(catalysts, for crosslinking of glycidyl acrylate copolymer binders, in nonwoven textiles)

IT 27274-54-0 41259-37-4 76091-23-1

RL: USES (Uses)

(binders, formaldehyde-free, for nonwoven textiles)

RN 27274-54-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 107-13-1 CMF C3 H3 N

H2C = CH-C = N

CM 3

CRN 106-91-2 CMF C7 H10 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2} \overset{\circ}{\longrightarrow} \overset{\circ}{\underset{\text{CH}_2}{\parallel}} \overset{\text{CH}_2}{\underset{\text{C}}{\parallel}}_{\text{Me}}$$

RN 41259-37-4 CAPLUS

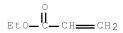
CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate and ethyl 2-propenoate (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

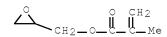
CM 2

CRN 140-88-5 CMF C5 H8 O2



CM 3

CRN 106-91-2 CMF C7 H10 O3



RN 76091-23-1 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with ethenyl acetate and oxiranylmethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 140-88-5 CMF C5 H8 O2

CM 2

CRN 108-05-4 CMF C4 H6 O2

Aco-CH-CH2

CM 3

CRN 106-90-1 CMF C6 H8 O3

$$\overset{\circ}{\longleftarrow}_{\text{CH}_2-\text{O}-}\overset{\circ}{\mathbb{C}}_{-\text{CH}}\underline{=}_{\text{CH}_2}$$

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L95 ANSWER 49 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:612006 CAPLUS Full-text

DOCUMENT NUMBER: 91:212006

ORIGINAL REFERENCE NO.: 91:34177a,34180a

TITLE: Copolymer dispersions by polymerization of acrylic

acid esters

INVENTOR(S): Hann, Ernst Wilhelm; Neubach, Werner

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 15 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2812038	A1	19790927	DE 1978-2812038	19780320 <
PRIORITY APPLN. INFO.:			DE 1978-2812038	19780320 <

- The title dispersions, stable in the presence of cationic resins and useful as binders for glass fibers, are prepared by polymerization in the presence of 0.5-1% Na or NH4 sulfate of a polyoxyalkylene, with addition of 1-4% similar surfactant after polymerization Thus, adding 7% aqueous Na2S2O8 and an emulsion of Me methacrylate 4376, iso-Bu acrylate 3852, methacrylamide 270, 2-hydroxypropyl acrylate 254, 35% aqueous Na phosphate of polyoxyethylated p-isooctylphenol (d.p. 25) 150, and H2O 4600 parts over 3 h to 45 parts 35% aqueous p-iso-C8H17C6H4(OCH2CH2)25OSO3Na [51441-90-8] stirred at 85°, cooling, and adding 150 parts 50% aqueous Na sulfate of polyoxyethylated tallow fatty alc. (d.p. 80) gives a 45% copolymer [72021-73-9] dispersion compatible with cationic resins.
- IC C08F220-18; C08F002-26
- CC 35-3 (Synthetic High Polymers)
- IT Binding materials

(acrylic polymer latexes, for glass fibers, manufacture of)

IT 33970-62-6P 34345-16-9P 72021-73-9P 72021-80-8P

72021-81-9P 72034-21-0P

RL: PREP (Preparation)

(latexes, manufacture of, emulsifiers for)

IT 72021-81-9P

RL: PREP (Preparation)

(latexes, manufacture of, emulsifiers for)

RN 72021-81-9 CAPLUS

CN 2-Propenoic acid, ethyl ester, polymer with ethenylbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-hydroxypropyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 999-61-1 CMF C6 H10 O3

CRN 923-02-4 CMF C5 H9 N O2

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 100-42-5 CMF C8 H8

H2C==CH-Ph

L95 ANSWER 50 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:576959 CAPLUS Full-text

DOCUMENT NUMBER: 91:176959

ORIGINAL REFERENCE NO.: 91:28541a,28544a

TITLE: Wood particleboard materials using formaldehyde

binding agent

INVENTOR(S): Graser, Martin; Hann, Ernst Wilhelm; Henkel, Helmut;

Mayer, Johann; Schmidt-Hellerau, Christof

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger. SOURCE: Eur. Pat. Appl., 15 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1237	A1	19790404	EP 1978-100818	19780904 <
EP 1237	В1	19810617		

R: BE, DE, FR, SE

AT 7806444 A 19810815 AT 1978-6444 19780906 <--

AT 366398 B 19820413

PRIORITY APPLN. INFO.: DE 1977-2740207 19770907 <--

Treating wood chips with aqueous emulsions containing paraffin, urea (I) [57-13-6], and acrylate copolymers and then with aminoplast solns., and hotpressing gave particleboard with low HCHO emission. Thus, a 50:50 beechspruce chip mixture was treated with a 4.47% mixture of Bu acrylate-Et acrylate-N-(hydroxymethyl)methacrylamide copolymer [71803-25-3], I, and paraffin and then with a 12% mixture of Kauramin [25212-25-3], NH4Cl, NH4OH, and I based on dry weight of chips, and pressed for 6 min at 165° and 2.5 N/mm2 to give a board having thickness 23 mm, moisture content 15.4%, d. 620 kg/m3, bending strength 18.6 N/mm2, swelling 1.5% after 2 h soaking in H2O, and HCHO emission 0.01%.

IC C08L097-02; B29J005-00; C08L061-20

CC 43-8 (Cellulose, Lignin, Paper, and Other Wood Products)
 Section cross-reference(s): 37

IT Binding materials

(aminoplasts and urea-containing acrylic copolymers, for manufacture of particleboard)

IT 71803-25-3 71804-19-8 71804-20-1 71835-17-1

RL: USES (Uses)

(urea containing paraffins and, binders, for particleboards)

IT 71804-20-1

RL: USES (Uses)

(urea containing paraffins and, binders, for particleboards)

RN 71804-20-1 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 1,2-propanediol mono-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 80-62-6 CMF C5 H8 O2 H2C O Me—C—C—OMe

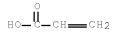
CM 4

CRN 25584-83-2 CMF C6 H10 O3

CCI IDS

CM 5

CRN 79-10-7 CMF C3 H4 O2



CM 6

CRN 57-55-6 CMF C3 H8 O2

OH H3C-CH-CH2-OH

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 51 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1979:88640 CAPLUS Full-text

DOCUMENT NUMBER: 90:88640

ORIGINAL REFERENCE NO.: 90:14059a,14062a

TITLE: Effect of the composition of binders on the quality of

pigment printing

AUTHOR(S): Vedeneeva, S. N.; Didenko, M. A.; Gandurin, L. I.;

Gerasimova, A. S.

CORPORATE SOURCE: Vses. Nauchno-Issled. Inst. Prir. Khim. Volokna,

Moscow, USSR

SOURCE: Tekstil'naya Promyshlennost (Moscow, Russian

Federation) (1978), (11), 57-60 CODEN: TTLPA2; ISSN: 0040-2397

DOCUMENT TYPE: Journal LANGUAGE: Russian

AB Stable pigment prints with good physicochem. and mech. properties are obtained using polymer binders containing both COOH and CH2OH groups, i.e. 8:4.5:3.5:14 Bu acrylate-methacrylic acid-N-methylolmethacrylamide-styrene copolymer [65291-56-7]. The effect of the composition of the binder on physicomech. properties. of films and the quality of printed fabrics was determined Soft, elastic films were obtained from polymers containing Bu acrylate and chemical

resistant films were obtained from polymers containing Me methacrylate and styrene. Dispersions with the highest stability were obtained in the presence of S 10 [60328-41-8] emulsifier. Pigment printing with binders containing $\leq\!4\%$ emulsifier and having pH <5 gave good results on acetate, triacetate, rayon and polyester fabrics.

CC 39-7 (Textiles)

IT Binding materials

(acrylic polymers, for textile printing, composition effect on properties of)

IT 25035-69-2 25035-89-6 25951-39-7 26715-67-3 27340-76-7

28935-09-3 65291-56-7 69254-23-5

69383-11-5

RL: USES (Uses)

(binder, for pigment printing on textiles)

IT 65291-56-7 69254-23-5 69383-11-5

RL: USES (Uses)

(binder, for pigment printing on textiles)

RN 65291-56-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H2C \longrightarrow CH - Ph$

CM 4

RN 69254-23-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

H2C CH-Ph

CM 4

CRN 80-62-6 CMF C5 H8 O2

RN 69383-11-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {\rm H2C} \quad {\rm O} \\ {\rm Me} \quad {\rm C} \quad {\rm C} \quad {\rm NH-CH2-OH} \end{array}$$

$$\begin{array}{c} {}^{\text{H2C}} {}^{\text{C}} {}^{\text{O}} \\ {}^{\text{Me}} {}^{\text{C}} {}^{\text{C}} {}^{\text{C}} {}^{\text{OMe}} \end{array}$$



L95 ANSWER 52 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:445001 CAPLUS Full-text

DOCUMENT NUMBER: 89:45001

ORIGINAL REFERENCE NO.: 89:7023a,7026a

TITLE: Acrylic latex for use on textile materials

INVENTOR(S): Plamondon, Joseph Edward; Wilber, William Robert;

Goth, Stephen

PATENT ASSIGNEE(S): Rohm and Haas Co., USA SOURCE: Ger. Offen., 29 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2726806	A1	19771229	DE 1977-2726806	19770614 <
US 4107120	A	19780815	US 1976-697171	19760617 <
CA 1112387	A1	19811110	CA 1977-279849	19770603 <
ZA 7703463	А	19780726	ZA 1977-3463	19770608 <
GB 1583671	А	19810128	GB 1977-24352	19770610 <
BR 7703801	A	19780509	BR 1977-3801	19770613 <
BE 855743	A1	19771216	BE 1977-178487	19770616 <
SE 7707021	А	19771218	SE 1977-7021	19770616 <
NL 7706667	A	19771220	NL 1977-6667	19770616 <
JP 53002590	A	19780111	JP 1977-71584	19770616 <
JP 55046645	В	19801125		
FR 2355038	A1	19780113	FR 1977-18571	19770616 <
FR 2355038	В1	19800425		
AU 7726170	A	19781221	AU 1977-26170	19770616 <
AU 511706	В2	19800904		
US 4181769	А	19800101	US 1977-837964	19770929 <
PRIORITY APPLN. INFO.:			US 1976-697171 A	
ACCICMMENT HICTORY FOR HE	מ בת הבו	ים זכו גוד גיזוג ידו		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

Heterpolymer latexes containing particles consisting of 30-60% polymeric core and 70-40% polymeric skin are manufactured by a 2-step emulsion polymerization of acrylic monomer mixts. containing small amts. of crosslinking agents which provide a core polymer having glass transition temperature, Tg, $\leq -20^{\circ}$ and a skin polymer having Tg 60 to -10° . The latexes are used to manufacture upholstery fabrics with good hand, drape, and low-temperature properties, coat leather and prepare (as binder) nonwoven fabrics. Thus, a heteropolymer latex containing 48% solids consisting of equal amts of a core 1:86:1:7:5 allyl methacrylate-Bu acrylate-itaconic acid-methacrylamide-Me methacrylate copolymer [65994-26-5] and sheath 57:1:35:7 butyl acrylate-itaconic acid-Me methacrylate-N-methylolmethacrylamide copolymer [65994-27-6] was coated on a silicone-coated release paper and dried to form a 50μ -thick film. An aqueous 2:96:2 acrylamide-Bu acrylate-N-methylolacrylamide copolymer emulsion containing TiO2, Aerotex MW, NH4 stearate, and NH4OH was mech. foamed and applied as a 1500μ -thick coating to cotton twill which was dried 5 min at 120°. The latex-coated paper was placed on the foam and the composite was laminated 3 at 80° under pressure and cured 5 min at 150° after removing the

paper. The upholstery fabric product had Bally flex value 100,000 and could withstand temps. as low as -35° without cracking.

IC C08F220-00

CC 39-6 (Textiles)

IT Binding materials

(acrylic polymer emulsions, containing bicomponent particles, for nonwoven textiles)

IT 65994-26-5 65994-27-6 65994-28-7

65994-29-8

RL: USES (Uses)

(bicomponent emulsion particles containing, for coating of textiles)

IT 65994-26-5 65994-27-6 65994-28-7

RL: USES (Uses)

(bicomponent emulsion particles containing, for coating of textiles)

RN 65994-26-5 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate, 2-methyl-2-propenamide and 2-propenyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 97-65-4 CMF C5 H6 O4

CM 3

CRN 96-05-9 CMF C7 H10 O2

CM 4

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} {}^{\text{H2C}}\text{C} \\ {}^{\text{Me}}\text{--}\text{C}\text{--}\text{OMe} \end{array}$$

CRN 79-39-0 CMF C4 H7 N O

RN 65994-27-6 CAPLUS

CN Butanedioic acid, methylene-, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {}^{\rm H2C} {}^{\rm C} {}^{\rm O} \\ {}^{\rm II} {}^{\rm II} \\ {}^{\rm Me} {}^{\rm C} {}^{\rm C} {}^{\rm C} {}^{\rm C} {}^{\rm NH} {}^{\rm CH} {}^{\rm CH} {}^{\rm 2} {}^{\rm OH} \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 97-65-4 CMF C5 H6 O4

CRN 80-62-6 CMF C5 H8 O2

RN 65994-28-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$^{\text{H2C}}$$
 $\overset{\circ}{\underset{\text{Me}}{\overset{}}}$ $\overset{\circ}{\underset{\text{C}}{\overset{}}}$ $\overset{\circ}{\underset{\text{NH}}{\overset{}}}$ $\overset{\circ}{\underset{\text{CH2}}{\overset{}}}$ $\overset{\circ}{\underset{\text{OH}}{\overset{}}}$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 97-90-5 CMF C10 H14 O4

CM 4

CRN 80-62-6 CMF C5 H8 O2



OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS

RECORD (18 CITINGS)

L95 ANSWER 53 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1978:63229 CAPLUS Full-text

DOCUMENT NUMBER: 88:63229

ORIGINAL REFERENCE NO.: 88:9991a,9994a

TITLE: Composition for use in printing textiles

INVENTOR(S): Gandurin, L. I.; Didenko, M. A.; Vedeneeva, S. N.;

Lukina, E. M.

PATENT ASSIGNEE(S): All-Union Scientific-Research and Experimental

Institute for the Processing of Chemical Fibers, USSR

SOURCE: Fr. Demande, 13 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	FR 2328747	A1	19770520	FR 1976-31042	19761015 <
	FR 2328747	В1	19790706		
	SU 617467	A1	19780730	SU 1975-2182370	19751020 <
PRIO:	RITY APPLN. INFO.:			SU 1975-2182370 A	19751020 <

AB Compns. for pigment printing natural and synthetic textiles by a classical procedure comprise pigment; Bu acrylate-methacrylic acid-N-methylolmethacrylamide-styrene copolymer [65291-56-7] binder 10-25; a synthetic acrylic thickener that is a copolymer of (meth)acrylic acid, an alkyl acrylate, and the dimethacrylate ester of ethylene glycol neutralized with a primary amine 1-2; a mixture of C3 or C5 alkenylamine and a hydrosiloxane 1-2; glycerol [56-81-5] 0-2; and H2O 63-87 parts.

IC C09B067-00

CC 39-7 (Textiles)

IT Binding materials

Thickening agents

(acrylic polymers, for pigment printing compns. for textiles)

IT 65291-56-7

RL: USES (Uses)

(binding agents, for pigment printing compns. for textiles)

IT 65291-56-7

RL: USES (Uses)

(binding agents, for pigment printing compns. for textiles)

RN 65291-56-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {}^{\rm H2C} {}^{\rm C} {}^{\rm O} \\ {}^{\rm Me} {}^{\rm C} {}^{\rm C} {}^{\rm C} {}^{\rm NH} {}^{\rm CH}{}^{\rm 2} {}^{\rm OH} \end{array}$$

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C \longrightarrow CH \longrightarrow Ph$

CM 4

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 54 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1976:61138 CAPLUS Full-text

DOCUMENT NUMBER: 84:61138

ORIGINAL REFERENCE NO.: 84:10069a,10072a

TITLE: Absorbent nonwoven fabrics

INVENTOR(S): Katz, Howard; Ganslaw, Stuart H.

PATENT ASSIGNEE(S): National Starch and Chemical Corp., USA

SOURCE: U.S., 10 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3922462	А	19751125	US 1974-459465	19740410 <
PRIORITY APPLN. INFO.:			US 1974-459465	19740410 <

AΒ A permanently absorbent nonwoven fabric consisted of a web of fibers, 5-100 weight% based on fibers of a crosslinkable binder, and 0.2-10 weight%, based on fibers and binder, of a surfactant consisting of at least 1 salt of a bisalkyl sulfosuccinate having alkyl substituents containing 13-4 carbon atoms. The most preferred surfactant was bis(tridecyl) sodium sulfosuccinate (I) [2673-22-5]. Carded rayon test webs were saturated to provide a 20 weight% dry resin add-on with a solution containing a copolymer [26337-27-9] made from 400 parts vinyl acetate and 10 parts N-methylolacrylamide and 10parts I, to give a fabric with initial absorbancy <1 sec and absorbancy after 2 aqueous extns. 6.6 sec compared to >300 sec for fabrics finished without I. IC D06N INCL 428290000 39-11 (Textiles) Binding materials ΙT (for rayon absorptive nonwoven fabrics) ΙT 25037-78-9 25085-41-0 25619-96-9 25951-70-6 26337-27-9 26428-41-1 26428-44-4 32875-87-9 58152-79-7 RL: USES (Uses) (binding materials, for absorbent rayon nonwoven fabrics) ΙT 25085-41-0 58152-79-7 RL: USES (Uses) (binding materials, for absorbent rayon nonwoven fabrics) 25085-41-0 CAPLUS 2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate (CA CN INDEX NAME) CM 1 CRN 141-32-2 CMF C7 H12 O2 n-BuO-C-CH-CH2 СМ 2 CRN 108-05-4 CMF C4 H6 O2 Aco-CH-CH2 CM CRN 79-10-7 CMF C3 H4 O2

RN 58152-79-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-oxiranylmethyl ester, polymer with butyl 2-propenoate, ethyl 2-propenoate and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 141-32-2 CMF C7 H12 O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 107-13-1 CMF C3 H3 N

CM 4

CRN 106-91-2 CMF C7 H10 O3

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS)

L95 ANSWER 55 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1975:580968 CAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 83:180968

ORIGINAL REFERENCE NO.: 83:28437a,28440a

TITLE: Pigment printing pastes

INVENTOR(S): Dachs, Karl; Lengsfeld, Wolfgang; Renner, Klaus C.;

Uhl, Guenter

PATENT ASSIGNEE(S): BASF A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 9 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2361423	A1	19750612	DE 1973-2361423	19731210 <
PRIORITY APPLN. INF	'O.:		DE 1973-2361423	19731210 <

AB A printing paste that produces a print of durable soft hand on natural or synthetic textile materials and their mixts. contains pigments, thickener, binder, water, emulsifier, and 0.1-1.0% methoxylated aminoplast whose methylol groups are ≥50% etherified with ≥20 mole% C10-30 alcs. and/or phenols. For example, to 100 parts 6% aqueous solution of ammonium polyacrylate were added 640 parts water, 180 parts 40% dispersion of 1:15:64:6:10:4 acrylic acid-acrylonitrile-butyl acrylate-3-chloro-2-hydroxypropyl acrylate-methyl methacrylate-N-methylolmethacrylamide polymer [56899-29-7] and 50 parts 25% aqueous paste of chlorinated Cu phthalocyanine. With vigorous stirrings, 30 parts of the reaction product between 1 mole hexakis(methoxymethyl)melamine [3089-11-0] with 3 moles dodecanol-1 [112-53-8] was emulsified in the mixture A print made on cotton with this paste gave a brilliant colors with good fastness.

IC D06P

CC 39-7 (Textiles)

IT Binding materials

(acrylic polymers-aminoplasts, for textile printing pastes)

IT 27288-66-0 28628-79-7 56899-29-7

RL: USES (Uses)

(binders, containing aminoplasts, for textile printing pastes)

IT 56899-29-7

RL: USES (Uses)

(binders, containing aminoplasts, for textile printing pastes)

RN 56899-29-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with butyl 2-propenoate, 3-chloro-2-hydroxypropyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide, 2-propenenitrile and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 3326-90-7 CMF C6 H9 C1 O3

CM 2

CRN 923-02-4 CMF C5 H9 N O2

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 107-13-1 CMF C3 H3 N

$$H \supseteq C \longrightarrow C H \longrightarrow C \longrightarrow N$$

CM 5

CRN 80-62-6 CMF C5 H8 O2

CM 6

CRN 79-10-7 CMF C3 H4 O2

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L95 ANSWER 56 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1974:146955 CAPLUS Full-text

DOCUMENT NUMBER: 80:146955

ORIGINAL REFERENCE NO.: 80:23730h,23731a

TITLE: Bonded nonwoven fabric

INVENTOR(S): Kelley, Louis E. PATENT ASSIGNEE(S): Rohm and Haas Co.

SOURCE: U.S., 6 pp. CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3776810	A	19731204	US 1971-182877	19710922 <
US 3812070	A	19740521	US 1971-208971	19711216 <
PRIORITY APPLN. INFO.:			US 1970-36499	A2 19700511 <
			US 1971-182877	A1 19710922 <

AΒ Polyalkylene glycol-modified copolymers of N-methylolacrylamides with acrylates were used as heat-curable binders and gave nonwoven fabrics with increased resilience, solvent-resistance and migration control. Fibrous polyester webs were treated with a mixture of methylolacrylamide-ethyl acrylate copolymer [26428-44-4] and polyethylene glycol [25322-68-3] mol. weight 285-3700. A control sample prepared without the glycol component was used for comparison. The webs treated with the glycol mixture showed an improved migration control. The resilience, as tensile load, was 10-20 for glycol-treated webs and 25 g for the control samples. Solvent resistance, determined by soaking the bonded fabric 15 min in perchlorethylene was 176-234 for a web sample containing a polyethylene glycol and 166-83 oz/in for the control sample. The same procedure was used for samples with varying proportions of the polyethylene glycol, mol. weight 285-315, from 2.5-12.5 weight %. The optimum migration control and resiliency were obtained with 5% glycol addition

IC B32B

INCL 161170000

CC 39-11 (Textiles)

IT Binding materials

(polyethylene glycol-modified acrylate-methylolacrylamide-unsatd. carboxylic acid polymers, for nonwoven synthetic textiles)

IT 26139-82-2 26428-44-4 51999-23-6 51999-24-7

RL: USES (Uses)

(binders, containing polyethylene glycol, for nonwoven synthetic textiles)

IT 51999-24-7

RL: USES (Uses)

(binders, containing polyethylene glycol, for nonwoven synthetic textiles)

RN 51999-24-7 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with butyl 2-propenoate,

N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-propenoate (9CI)

(CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 96-33-3 CMF C4 H6 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L95 ANSWER 57 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1972:407260 CAPLUS Full-text

DOCUMENT NUMBER: 77:7260

ORIGINAL REFERENCE NO.: 77:1251a,1254a

TITLE: Bonded fiber filling material

PATENT ASSIGNEE(S): du Pont de Nemours, E. I., and Co.

SOURCE: Brit., 8 pp. CODEN: BRXXAA

DOCUMENT TYPE: Patient LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT N	Ο.	KIND	DATE	APPLICATION NO.	DATE
GB 12672	94		19720315	GB 1970-15528	19700401 <
US 36602	22		19720502	US	19690401 <
PRIORITY APPL	N. INFO.:			US 1969-811819	19690401 <

AΒ The title material with improved softness and support bulk, useful as filler in cushions and insulation, was prepared by discharging crimped intermingled fibers from an oscillating flat surface onto a horizontal flat surface and simultaneously spraying the layer with a resin so that 50% of the fiber contains .geq.70.deg. of the resin after each pass of the oscillating surface. Thus, poly(ethylene terephthalate) fibers (about 9.5 crimps per in.) were discharged from a conventional double-doffer garnett-crosslapper system onto an apron at 10 ft. per min and sprayed simultaneously with a composition containing a 23% solids Et acrylate-methacrylic acid-methyl methacrylate-Nmethylolmethacrylamide copolymer (I) [30943-44-3] emulsion and a crosslinker to give a laminate of 10 thin fiber layers containing about 75% I in the top half of each layer. The laminate was heated 2 and 4 min at 196.deg. to give soft material with a filling support weight 1.80 lbs. compared with 2.2 lbs. for previously prepared filler of similar softness. Process and apparatus and diagrams are given.

IC B32B; D04H

CC 39-11 (Textiles)

IT Binding materials

(acrylic polymers, for intermingled crimped polyester fibers for cushion filling material)

IT 30943-44-3

RL: USES (Uses)

(binding materials, for crimped intermingled polyester fibers, for filling materials for cushion)

IT 30943-44-3

RL: USES (Uses)

(binding materials, for crimped intermingled polyester fibers, for filling materials for cushion)

RN 30943-44-3 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 140-88-5 CMF C5 H8 O2

CM 3

CRN 80-62-6

CMF C5 H8 O2

CM 4

CRN 79-41-4 CMF C4 H6 O2

L95 ANSWER 58 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:32667 CAPLUS Full-text

DOCUMENT NUMBER: 74:32667

ORIGINAL REFERENCE NO.: 74:5241a,5244a

TITLE: Manufacturing of bound, nonwoven fabric according to

the wet process

INVENTOR(S): Stephan, Rudolf; Bug, Willi; Frank, Hans Ulrich

PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Ger. Offen., 7 pp. Addn. to Ger. Offen. 1,769,700

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE	1915156	A	19701001	DE 1969-1915156	19690325 <
SE	352390	В	19721227	SE 1970-3946	19700302 <
NL	7003869	A	19700929	NL 1970-3869	19700318 <
FR	2035874	A6	19701224	FR 1970-10360	19700323 <
FR	2035874	В2	19740503		
GB	1296418	A	19721115	GB 1970-1296418	19700324 <
JP	49026103	В	19740705	JP 1970-24526	19700325 <
PRIORITY	APPLN. INFO.:			DE 1969-1915156	A 19690325 <

AB The wet process for nonwoven fabrics (Ger. Offen. 1,769,700) was modified by bonding fibers with an acrylic polymer, polyamide, and a water-soluble cationic polycondensate. A suspension of viscose fibers, birch cellulose, and polyamide fibers in water containing a cationic condensate of urea, dicyandiamide, and HCHO was treated with an aqueous suspension of 93:3:3:1 Bu acrylate-N-methylolmethacrylamide-acrylonitrile-acrylic acid copolymer and an aqueous solution of 1:1:0.22 copolyamide of adipic acid, diethylenetriamine, and caprolactam, crosslinked with 1.4 mole epichlorohydrin. The stirred suspension was filtered and dried at 120° to give desired fleece having dry abrasion resistance (DIN 53112) 120 kg/cm2.

- IC D21H005-20
- CC 39 (Textiles)
- IT Binding materials

(acrylic polymers, for nonwoven fabrics)

```
ΙT
    25085-41-0, uses and miscellaneous 27968-41-8, uses and
    miscellaneous 28430-11-7 28928-66-7, uses and
    miscellaneous
    RL: USES (Uses)
       (binders, for nonwoven textiles)
ΙT
    25085-41-0, uses and miscellaneous 28430-11-7
    28928-66-7, uses and miscellaneous
    RL: USES (Uses)
       (binders, for nonwoven textiles)
RN
    25085-41-0 CAPLUS
CN
    2-Propenoic acid, polymer with butyl 2-propenoate and ethenyl acetate (CA
    INDEX NAME)
    CM 1
    CRN 141-32-2
    CMF C7 H12 O2
 n-Bu0-C-CH-CH2
    CM
         2
    CRN 108-05-4
    CMF C4 H6 O2
Aco-CH-CH2
    CM
         3
    CRN 79-10-7
    CMF C3 H4 O2
RN
    28430-11-7 CAPLUS
    2-Propenoic acid, polymer with butyl 2-propenoate and
    N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)
    CM
        1
    CRN 923-02-4
    CMF C5 H9 N O2
```

$$\begin{array}{c} {}^{\text{H2C}} {}^{\text{C}} {}^{\text{O}} {}^{\text{O}} {}^{\text{Me}} - {}^{\text{C}} {}^{\text{C}} {}^{\text{C}} {}^{\text{C}} {}^{\text{NH}} - {}^{\text{CH}} {}^{\text{C}} {}^{\text{CH}} {}^{\text{O}} {}^{\text{H}} \end{array}$$

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 79-10-7 CMF C3 H4 O2

RN 28928-66-7 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {}^{\rm H\,2\,C} \\ {}^{\rm C} \\ {}^{\rm M\,e} - {}^{\rm C} - {}^{\rm C} - {}^{\rm N\,H} - {}^{\rm C\,H\,2} - {}^{\rm O\,H} \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 107-13-1 CMF C3 H3 N

 $H \supseteq C \longrightarrow C H \longrightarrow C \longrightarrow N$

CM 4

CRN 79-10-7 CMF C3 H4 O2

HO-C-CH-CH2

L95 ANSWER 59 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1971:23615 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 74:23615

ORIGINAL REFERENCE NO.: 74:3825a,3828a

TITLE: Wet-bonded textile fibrous films PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Fr. Demande, 9 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	FR 2014444		19700417	FR 1969-21737	19690627 <
	DE 1769700			DE	
	GB 1263488			GB	
	US 3635776		19720118	US	19690627 <
PRIO:	RITY APPLN. INFO.:			DE	19680629 <

AB Fibrous films with improved tensile strength, hand, and tear resistance were prepared by the wet-bonding of fiber suspensions with aqueous polymeric binders. Thus, an aqueous suspension of polycaprolactam fibers, ethoxylated fatty alc., urea-cyanoguanidine-HCHO-ammonium chloride polycondensate, rosin soap, and Bu acrylate-acrylic acid N-(hydroxymethyl)methacrylamide-acrylonitrile copolymers was placed on a film-forming machine, and the film dried to give a product suitable for manufacturing clothes and disposable articles with good mech. properties.

IC D04H; D06M

CC 39 (Textiles)

IT Binding materials

(acrylic polymers-urea condensation products, for wet-bonding of synthetic fibrous films)

IT 28928-66-7, uses and miscellaneous

RL: USES (Uses)

(binders, for synthetic fibrous films)

IT 28928-66-7, uses and miscellaneous

RL: USES (Uses)

(binders, for synthetic fibrous films)

RN 28928-66-7 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate,

N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenenitrile (CA INDEX NAME)

CM 1

CRN 923-02-4

CMF C5 H9 N O2

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 107-13-1

CMF C3 H3 N

$$H \ge C \longrightarrow C H \longrightarrow C \longrightarrow N$$

CM 4

CRN 79-10-7

CMF C3 H4 O2

L95 ANSWER 60 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1971:23614 CAPLUS Full-text

DOCUMENT NUMBER: 74:23614

ORIGINAL REFERENCE NO.: 74:3825a,3828a

TITLE: Wet-bonded textile fibrous films PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Fr. Demande, 9 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	FR 2014443		19700417	FR 1969-21736	19690627 <
	DE 1769699			DE	
	GB 1263098			GB	
	US 3657031		19720418	US	19690627 <
PRIO	RITY APPLN. INFO.:			DE	19680629 <

AB Hygienic disposable articles with improved hand were prepared from rayon or polycaprolactam fibers, pretreated with an organic quaternary ammonium salt, and wet-bonded with aqueous polymeric binders. Thus, an aqueous suspension of rayon fibers and dodecylbenzyldimethylammonium chloride was treated with 1:1 Me acrylate-acrylonitrile copolymer, saponified with HN3, treated with Bu acrylate-acrylic acid-N-(hydroxymethyl)methacrylamide copolymers, sulfated ethylene oxide-nonylphenol adduct, and Turkey red oil, and placed on a film-forming machine to give a hygienic disposable article with fungicidal and bactericidal properties.

IC D04H; A61F; D06M

CC 39 (Textiles)

IT Binding materials

(acrylic polymers, for ammonium salt-treated synthetic fibers in hygienic disposable article manufacture)

IT 24968-79-4, uses and miscellaneous 25085-41-0, uses and miscellaneous

25549-84-2 26604-01-3, uses and miscellaneous 28430-11-7 30660-66-3 30660-67-4, uses and miscellaneous 30660-68-5

RL: USES (Uses)

(binders, for hygienic disposable article manufacture from synthetic fibers treated with quaternary ammonium salts)

IT 28430-11-7

RL: USES (Uses)

(binders, for hygienic disposable article manufacture from synthetic fibers treated with quaternary ammonium salts)

RN 28430-11-7 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate and N-(hydroxymethyl)-2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM

CRN 79-10-7 CMF C3 H4 O2

HO-C-CH-CH2

L95 ANSWER 61 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1971:23412 CAPLUS Full-text

DOCUMENT NUMBER: 74:23412 ORIGINAL REFERENCE NO.: 74:3797a,3800a

Self-cross-linking aqueous TITLE:

emulsions

INVENTOR(S): Chujo, Sumi; Harada, Yoichi; Ueda, Shinichi; Tokuhara,

Shinji; Tanaka, Kazunobu; Kojima, Katsumi

Daicell Co., Ltd. PATENT ASSIGNEE(S):

Jpn. Tokkyo Koho, 10 pp. SOURCE:

CODEN: JAXXAD

Patent DOCUMENT TYPE: Japanese LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

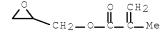
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 45028999	B4	19700921	JP	19670630 <

19700921 Mixts. (35-80 parts) (A) of vinyl acetate or (and) vinyl propionate and acrylonitrile or (and) a methacrylate, 20-65 parts acrylate or methacrylate mixts. (B), 1-4.5 weight % (based on A + B) unsated. acid mixts., and $\leq 20\%$ (on A + B) vinyl monomer mixts. are emulsion copolymd. at pH <5 in the presence of 4-8% (on monomers) surfactants to give the title emulsions useful as binders and adhesives. For example, 10.2 g Triton X-200 and 15 g Nonion NS-230 in 323 g H2O are mixed with 0.6 g silicone defoaming agent, heated to 70° under N, and initially mixed at 75° with 5% of a mixture of vinyl acetate 123, acrylonitrile 6, Bu acrylate 171, acrylic acid 10.5, and glycidyl methacrylate 6 g and with 30% of a solution of 0.9 g K2S2O8 in 80 g H2O; the whole was stirred 30 min. The remainder of the monomer mixture was added dropwise during 3 hr, the whole heated to 80°, and the rest of the catalyst solution added dropwise during 10 min. The product is kept 1 hr at 80°, cooled to 35° , mixed with 0.6 g silicone defoaming agent (50% solids), and adjusted to pH 3.5 with NaHCO3 to give an emulsion (44% solids, 0.52% residual monomer, 20 cP viscosity, and $0.1-0.3~\mu$ particle size, and 34.5dynes/cm surface tension.) The emulsion is adjusted to pH 6, mixed with 10 weight % (on solids) SM-700 (etherified methylolmelamine) and 1 weight % (on solids) hardening agent, poured on a substrate, and cured 20 min at 150° to give a coating with 11 kg/cm2 elastic modulus and 85% insol. after 8 hr boiling in trichloroethylene.

INCL 26B131

```
CC
     36 (Plastics Manufacture and Processing)
ST
     emulsion self crosslinking resin; crosslinkable resin;
     vinyl acetate copolymer; acrylonitrile copolymer; glycidyl methacrylate
     copolymer; methacrylate glycidyl copolymer
ΙT
     Adhesives, preparation
       Binding materials
        (butyl acrylate copolymers, crosslinked)
ΙT
    Crosslinking
        (of butyl acrylate copolymer emulsions, for adhesives and binders)
ΙT
     30640-80-3P, preparation
     RL: PREP (Preparation)
        (manufacture of, for adhesives and binders)
ΙT
     30640-80-3P, preparation
     RL: PREP (Preparation)
        (manufacture of, for adhesives and binders)
RN
     30640-80-3 CAPLUS
CN
     2-Propenoic acid, 2-methyl-, 2-(2-oxiranylmethyl) ester, polymer with
     butyl 2-propenoate, ethenyl acetate, 2-propenenitrile and 2-propenoic acid
       (CA INDEX NAME)
     CM
        1
     CRN 141-32-2
     CMF C7 H12 O2
 n-BuO-C-CH-CH2
     CM
          2
     CRN 108-05-4
     CMF C4 H6 O2
 AcO-CH-CH2
    CM
          3
     CRN 107-13-1
     CMF C3 H3 N
 H 2 C === C H == C === N
     CM
     CRN 106-91-2
```

CMF C7 H10 O3



CM 5

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 62 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1971:4594 CAPLUS <u>Full-text</u>

DOCUMENT NUMBER: 74:4594
ORIGINAL REFERENCE NO.: 74:735a,738a

TITLE: Optically blued fibrous sheets
PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Fr. Demande, 10 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2012370	A1	19700320	FR 1969-22557	19690703 <
PRIORITY APPLN. INFO.:			DE 1967-1769742 A	19680705 <

GI For diagram(s), see printed CA Issue.

AB Sheets containing fibers of polycaprolactam (I), cellulose, or poly(ethylene terephthalate) are impregnated with bonding agents comprising aqueous dispersions of copolymers of Ia (R1 = H, R2 = R3 = Me) (II); R1 = Me, R2 = Bu, R3 = Et; or R1 = H, R2 = Me, R3 = Bu as optical bluing agents 0.1-10, crosslinking olefins 1-15, and other olefins 75-98.9% to give optically blue bonded sheets of good washfastness and dry cleaning solvent resistance. E.g., a I sheet was impregnated with a 20% aqueous dispersion of a copolymer prepared from Et acrylate 88, acrylic acid 1, HOCH2NHCOCMe:CH2 5, HO(CH2)4O2CCH:CH2 5, and II 1% to give .apprx.30% copolymer pick-up and dried at 150° to give washfast and perchloroethylene-resistant optical bluing to the sheet.

- IC D06M015-00A; C08F015-00-
- CC 39 (Textiles)
- IT Binding materials

Fluorescent brightening agents

(dialkyl acrylamidoalkoxyterephthalate copolymers, for fibrous sheets)

IT 27288-65-9, uses and miscellaneous

RL: USES (Uses)

(binding materials, for fibrous sheets containing optical brightening agents)

IT 30351-70-3 30351-71-4 31227-01-7, uses

and miscellaneous

RL: USES (Uses)

(optical brightening agents, for bonded fibrous sheets)

IT 27288-65-9, uses and miscellaneous

RL: USES (Uses)

(binding materials, for fibrous sheets containing optical brightening agents)

RN 27288-65-9 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and

N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4

CMF C5 H9 N O2

$$\begin{array}{c} {}^{\text{H2C}}{}_{\text{C}} \\ {}^{\text{O}}{}_{\text{Me}} - {}^{\text{C}}{}_{\text{C}} - {}^{\text{NH}} - {}^{\text{CH}}{}_{\text{2}} - {}^{\text{OH}} \end{array}$$

CM 2

CRN 141-32-2

CMF C7 H12 O2

CM 3

CRN 100-42-5

CMF C8 H8

 $H 2 C \longrightarrow CH \longrightarrow Ph$

CM 4

CRN 79-10-7

CMF C3 H4 O2

IT 30351-70-3 30351-71-4 31227-01-7, uses

and miscellaneous

RL: USES (Uses)

(optical brightening agents, for bonded fibrous sheets)

RN 30351-70-3 CAPLUS

CN Terephthalic acid, 2-acrylamido-5-methoxy-, dimethyl ester, polymer with acrylic acid, N-(butoxymethyl)-2-methylacrylamide and ethyl acrylate (8CI) (CA INDEX NAME)

CM 1

CRN 28056-80-6 CMF C14 H15 N O6

$$MeO = C$$

$$MeO = C$$

$$C = OMe$$

$$C = OMe$$

CM 2

CRN 5153-77-5 CMF C9 H17 N O2

CM 3

CRN 140-88-5 CMF C5 H8 O2

CM 4

CRN 79-10-7 CMF C3 H4 O2

RN 30351-71-4 CAPLUS

CN Terephthalic acid, 2-acrylamido-5-methoxy-, dimethyl ester, polymer with acrylic acid, ethyl acrylate, 4-hydroxybutyl acrylate and N-(hydroxymethyl)-2-methylacrylamide (8CI) (CA INDEX NAME)

CM 1

CRN 28056-80-6 CMF C14 H15 N O6

$$MeO = C \qquad NH = C - CH = CH_2$$

$$MeO = C - OMe$$

CM 2

CRN 2478-10-6 CMF C7 H12 O3

CM 3

CRN 923-02-4 CMF C5 H9 N O2

CM 4

CRN 140-88-5 CMF C5 H8 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 31227-01-7 CAPLUS

CN Terephthalic acid, 2-butoxy-5-methacrylamido-, diethyl ester, polymer with acrylic acid, butyl acrylate, N-(hydroxymethyl)acrylamide, methacrylamide and styrene (8CI) (CA INDEX NAME)

CM 1

CRN 28056-81-7 CMF C20 H27 N O6

CM 2

CRN 924-42-5 CMF C4 H7 N O2

CM 3

CRN 141-32-2 CMF C7 H12 O2

CM 4

CRN 100-42-5 CMF C8 H8 H2C==CH-Ph

CM 5

CRN 79-39-0 CMF C4 H7 N O

CM

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 63 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN

1970:436424 CAPLUS <u>Full-text</u> ACCESSION NUMBER:

DOCUMENT NUMBER: 73:36424

ORIGINAL REFERENCE NO.: 73:6025a,6028a

TITLE: Sheets of agglutinated fibers

PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG SOURCE: Fr. Addn., 4 pp. Addn. to Fr. 1388473

CODEN: FAXXA3

DOCUMENT TYPE: Patent LANGUAGE: French

the impregnation binder.

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: _____

520 <
520 <
gth are
olymers
allyl
ylonitrile
used as

- D06M; D04H IC
- 39 (Textiles) CC
- ΙT Binding materials

(allyl ester copolymers, for nylon fibers)

IT 28264-46-2, uses and miscellaneous 28264-75-7, uses and miscellaneous 28803-93-2

RL: USES (Uses)

(binding materials, for nylon fibers)

IT 28264-46-2, uses and miscellaneous 28803-93-2

RL: USES (Uses)

(binding materials, for nylon fibers)

RN 28264-46-2 CAPLUS

CN Phthalic acid, diallyl ester, polymer with acrylic acid, acrylonitrile, butyl acrylate and N-(hydroxymethyl)-2-methylacrylamide (8CI) (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 131-17-9 CMF C14 H14 O4

CM 4

CRN 107-13-1 CMF C3 H3 N $\texttt{H} \, \texttt{2} \, \texttt{C} \underline{\hspace{1cm}} \, \texttt{C} \, \texttt{H} \underline{\hspace{1cm}} \, \texttt{C} \underline{\hspace{1cm}} \, \texttt{N}$

CM 5

CRN 79-10-7 CMF C3 H4 O2

RN 28803-93-2 CAPLUS

CN Terephthalic acid, bis(2-methylallyl) ester, polymer with acrylic acid, ethylene acrylate, 2-ethylhexyl acrylate and N-(hydroxymethyl)-2-methylacrylamide (8CI) (CA INDEX NAME)

CM 1

CRN 2985-54-8 CMF C16 H18 O4

CM 2

CRN 2274-11-5 CMF C8 H10 O4

CM 3

CRN 923-02-4 CMF C5 H9 N O2

CM 4

CRN 103-11-7 CMF C11 H20 O2

CM 5

CRN 79-10-7 CMF C3 H4 O2

L95 ANSWER 64 OF 64 CAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1970:101790 CAPLUS Full-text

DOCUMENT NUMBER: 72:101790

ORIGINAL REFERENCE NO.: 72:18485a,18488a

TITLE: Binders for textile pigments

product with excellent friction resistance.

PATENT ASSIGNEE(S): Badische Anilin- & Soda-Fabrik AG

SOURCE: Fr. Demande, 7 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

	FR 2003889	19691114	FR 1969-7123	19690313 <		
	DE 1719395		DE			
	GB 1210056		GB			
ΡI	RIORITY APPLN. INFO.:		DE	19680314 <		
ΑI	B Poly(ammonium acryla	tes) (I) containi	ng copolymd, buty	lene diacrylate (II),		
	methyl-enedimethacry	lamide, hexylene	diacrylate, or all	lyl adipate, and		
	butadiene-acrylonitr	ile-styrene - N-(hydroxymethyl)metl	nacrylamide (II I)		
copolymer (12:3:4:1) (IV), butadiene-styrene-III copolymer (12:7:1), Bu						
	acrylate-acrylonitri	le-vinyl chloride	-III copolymer (12	2:4:3:1), or butadiene-		
	acrylonitrile-III co	polymer (66.7:28.	5:4.8) are used as	s binders for textile		
	pigments to improve	the washing and f	riction fastness o	of the textile. Thus, a		
	mixture of 50 parts	20% Cu phthalocya	nine and 950 parts	s of an aqueous mixture		

containing 5 parts I, copolymd. with 0.1% II, and 35 parts IV was used for printing cotton textile. The fabric was dried 5 min at 140° to give soft

KIND DATE APPLICATION NO. DATE

IC C08F; D06P

а

CC 39 (Textiles)

IT Binding materials

(acrylic acid polymer-methacrylamide derivative polymer, for pigments on textiles)

IT 25135-82-4, uses and miscellaneous 27288-64-8, uses and miscellaneous 27288-65-9, uses and miscellaneous 27288-66-0, uses and miscellaneous 27288-68-2, uses and miscellaneous

RL: USES (Uses)

(binders from acrylate copolymers containing, for pigments on textiles)

IT 27288-65-9, uses and miscellaneous

RL: USES (Uses)

(binders from acrylate copolymers containing, for pigments on textiles)

RN 27288-65-9 CAPLUS

CN 2-Propenoic acid, polymer with butyl 2-propenoate, ethenylbenzene and N-(hydroxymethyl)-2-methyl-2-propenamide (CA INDEX NAME)

CM 1

CRN 923-02-4 CMF C5 H9 N O2

$$\begin{array}{c} {\rm H2C} \quad {\rm O} \\ {\rm Me} \quad {\rm U} \quad {\rm U} \\ {\rm Me} \quad {\rm C-C-NH-CH2-OH} \end{array}$$

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H2C \longrightarrow CH \longrightarrow Ph$

CM 4

CRN 79-10-7 CMF C3 H4 O2

FILE 'HOME' ENTERED AT 16:36:24 ON 29 MAR 2010

SEARCH HISTORY

```
=> d stat que 135; d stat que 136; d stat que 138; d his nofile
           50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
L9
             3 SEA FILE=REGISTRY POLYLINK L8
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
               SEL L10 1- RN : 3 TERMS
L11
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L12
L14
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
         22795 SEA FILE=REGISTRY SPE=ON ABB=ON 103-11-7/CRN
L27
         54890 SEA FILE=REGISTRY SPE=ON ABB=ON 141-32-2/CRN
L28
L35
          6225 SEA FILE=REGISTRY SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7
               OR L12)
            50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN
L7
             2 SEA FILE=REGISTRY SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN
L8
               OR "GLYCIDYL METHACRYLATE HOMOPOLYMER"/CN)
             3 SEA FILE=REGISTRY POLYLINK L8
L9
L10
             3 SEA FILE=REGISTRY SPE=ON ABB=ON (L8 OR L9)
               SEL L10 1- RN : 3 TERMS
L11
         20962 SEA FILE=REGISTRY SPE=ON ABB=ON L11/CRN
L12
           587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN
L14
L15
               STR
                                 7
0
1
0
8
2
9
              CH2~0~CH2
```

VAR G1=4/8/10/12VAR G2=N/O NODE ATTRIBUTES:

CONNECT IS E1 RC AT 11 CONNECT IS E2 RC AT 12

CONNECT IS E1 RC AT 14

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L17 SCR 2043

L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17

L20 STR

VAR G1=8/9

VAR G2=H/ME
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 8
DEFAULT MLEVEL IS ATOM
GGCAT IS SAT AT 9
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

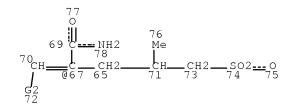
L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20

L31 STR

G4 101

Page 1-A

Page 2-A



Page 3-A VAR G1=H/ME VAR G2=H/ME/COOH VAR G3=CH2/97 VAR G4=2/6/11/16/23/29/37/44/54/85/67/95 NODE ATTRIBUTES: CONNECT IS E2 RC AT 33 CONNECT IS E2 RC AT 39 CONNECT IS E1 RC AT 41 CONNECT IS E2 RC AT 48 CONNECT IS E1 RC AT 51 CONNECT IS E1 RC AT 63 CONNECT IS E1 RC AT 75 CONNECT IS E1 RC AT 88 DEFAULT MLEVEL IS ATOM

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 97

STEREO ATTRIBUTES: NONE

DEFAULT ECLEVEL IS LIMITED

L7 50 SEA FILE=REGISTRY SPE=ON ABB=ON 25155-30-0/CRN 587 SEA FILE=REGISTRY SPE=ON ABB=ON 923-02-4/CRN STR



VAR G1=4/8/10/12
VAR G2=N/O
NODE ATTRIBUTES:
CONNECT IS E1 RC AT 11
CONNECT IS E2 RC AT 12
CONNECT IS E1 RC AT 14
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 14

STEREO ATTRIBUTES: NONE

L17 SCR 2043

L19 420517 SEA FILE=REGISTRY SSS FUL L15 AND L17

L20 STR

VAR G1=8/9

VAR G2=H/ME

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 8

DEFAULT MLEVEL IS ATOM

GGCAT IS SAT AT 9

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

L22 198213 SEA FILE=REGISTRY SUB=L19 SSS FUL L20

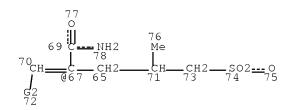
L31 STF

G4 101

Page 1-A

$$\begin{array}{c} 38 \\ G1 \\ CH2 = \begin{array}{c} C \\ C \\ 36 \end{array} \\ \begin{array}{c} CH2 = \begin{array}{c} C \\ C \\ 36 \end{array} \\ \begin{array}{c} CH2 = \begin{array}{c} C \\ C \\ 36 \end{array} \\ \begin{array}{c} G1 \\ 39 \end{array} \\ \begin{array}{c} G2 \\ 43 \end{array} \\ \end{array}$$

Page 2-A



Page 3-A VAR G1=H/ME VAR G2=H/ME/COOH VAR G3=CH2/97 VAR G4=2/6/11/16/23/29/37/44/54/85/67/95 NODE ATTRIBUTES: CONNECT IS E2 RC AT 33 CONNECT IS E2 RC AT 39 CONNECT IS E1 RC AT 41 CONNECT IS E2 RC AT 48 CONNECT IS E1 RC AT 51 CONNECT IS E1 RC AT 63 CONNECT IS E1 RC AT 75 CONNECT IS E1 RC AT 88

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 97

STEREO ATTRIBUTES: NONE

DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

(FILE 'HOME' ENTERED AT 15:04:08 ON 29 MAR 2010)
D SAVED

FILE 'REGISTRY' ENTERED AT 15:05:29 ON 29 MAR 2010 ACT PEZ676REG/A

L1 6 SEA SPE=ON ABB=ON (35919-18-7/BI OR 37001-63-1/BI OR 42884-82-2/BI OR 53754-89-5/BI OR 58479-12-2/BI OR 69572-24-3/B T)

ACT PEZ676REG2/A

50 SEA SPE=ON ABB=ON (12190-79-3/BI OR 518050-52-7/BI OR L2 7440-44-0/BI OR 7782-42-5/BI OR 105-58-8/BI OR 108-32-7/BI OR 198826-55-0/BI OR 24968-79-4/BI OR 25036-16-2/BI OR 25134-58-1/ BI OR 25214-69-1/BI OR 25511-01-7/BI OR 25749-57-9/BI OR 26636-08-8/BI OR 26950-51-6/BI OR 27290-61-5/BI OR 27380-08-1/B I OR 28326-46-7/BI OR 30396-85-1/BI OR 31213-82-8/BI OR 35919-18-7/BI OR 37001-63-1/BI OR 411234-54-3/BI OR 42884-82-2/ BI OR 43094-74-2/BI OR 4437-85-8/BI OR 518050-53-8/BI OR 518050-54-9/BI OR 518050-55-0/BI OR 518050-56-1/BI OR 518050-57 -2/BI OR 518050-58-3/BI OR 53754-89-5/BI OR 58479-12-2/BI OR 616-38-6/BI OR 623-53-0/BI OR 69572-24-3/BI OR 716378-75-5/BI OR 716378-76-6/BI OR 716378-77-7/BI OR 7440-06-4/BI OR 7440-21-3/BI OR 7440-42-8/BI OR 7440-50-8/BI OR 872-36-6/BI OR 882693-00-7/BI OR 9003-18-3/BI OR 9003-55-8/BI OR 9004-32-4/BI OR 96-49-1/BI)

D SCA L1

O SEA SPE=ON ABB=ON L2 AND S/ELS L3 E SODIUM DODECYLBENZENESULFONATE/CN

1 SEA SPE=ON ABB=ON "SODIUM DODECYLBENZENESULFONATE"/CN L4D SCA

> E BENZENESULFONIC ACID, DODECYL-, SODIUM SALT/CN E 2-BENZENESULFONIC ACID, DODECYL-, SODIUM SALT/CN

1 SEA SPE=ON ABB=ON "2-BENZENESULFONYL-4-(2-((TERT-BUTOXYCARBON YL) (METHYL) AMINO) ETHOXY) INDOLE-1-CARBOXYLIC ACID TERT-BUTYL ESTER"/CN

D SCA

E BENZENESULFONIC ACID, DODECYL-, SODIUM SALT/CN

1 SEA SPE=ON ABB=ON "BENZENESULFONIC ACID, DODECYL-, SODIUM SALT, COMPD. WITH 2-(DIMETHYLAMINO)ETHYL 2-METHYL-2-PROPENOATE HOMOPOLYMER AND N, N'-METHYLENEBIS (2-PROPENAMIDE) POLYMER WITH 2-PROPENOIC ACID SODIUM SALT"/CN

D SCA

D IDE L4

L7 50 SEA SPE=ON ABB=ON 25155-30-0/CRN

E GLYCIDYL METHACRYLATE/CN

2 SEA SPE=ON ABB=ON ("GLYCIDYL METHACRYLATE"/CN OR "GLYCIDYL L8 METHACRYLATE HOMOPOLYMER"/CN)

D SCA

L*** DEL 1 S L8 AND RELATED POLYMERS/FA

L*** DEL ANALYZE L*** 1- RN LNK\$: 2 TERMS

L*** DEL 2 S L***

L5

L6

L9 3 POLYLINK L8

D SCA

3 SEA SPE=ON ABB=ON (L8 OR L9) L10

SET SMARTSELECT ON

3 TERMS L11 SEL L10 1- RN :

SET SMARTSELECT OFF

L12 20962 SEA SPE=ON ABB=ON L11/CRN

D COST FULL

E N-METHYLOLMETHACRYLATE/CN

```
E N-METHYLOLMETHACRYLAMIDE/CN
L13
             1 SEA SPE=ON ABB=ON N-METHYLOLMETHACRYLAMIDE/CN
               D SCA
               D REG L13
           587 SEA SPE=ON ABB=ON 923-02-4/CRN
L14
L15
               STR
L16
            50 SEA SSS SAM L15
              SCREEN 2043
L17
L18
            50 SEA SSS SAM L15 AND L17
       420517 SEA SSS FUL L15 AND L17
L19
L20
               STR
            50 SEA SUB=L19 SSS SAM L20
L21
L22
       198213 SEA SUB=L19 SSS FUL L20
               SAVE TEMP L22 PEZ676SUB1/A
        24539 SEA SPE=ON ABB=ON L22 AND C11H20O2
L23
         59534 SEA SPE=ON ABB=ON L22 AND C7H12O2
L25
             5 SEA SPE=ON ABB=ON L1 AND L23
               D IDE
             1 SEA SPE=ON ABB=ON L24 AND L1
L26
               D IDE
         22795 SEA SPE=ON ABB=ON 103-11-7/CRN
T.27
L28
         54890 SEA SPE=ON ABB=ON 141-32-2/CRN
L29
               STR
    FILE 'STNGUIDE' ENTERED AT 15:36:21 ON 29 MAR 2010
    FILE 'REGISTRY' ENTERED AT 15:43:08 ON 29 MAR 2010
L30
      STR L29
    FILE 'STNGUIDE' ENTERED AT 15:44:09 ON 29 MAR 2010
    FILE 'REGISTRY' ENTERED AT 15:55:04 ON 29 MAR 2010
L31
              STR L30
            50 SEA SUB=L19 SSS SAM L31
L32
L33
       197550 SEA SUB=L19 SSS FUL L31
              SAVE TEMP L33 PEZ676SUB2/A
               E 16.138/RID
        48120 SEA SPE=ON ABB=ON 16.138/RID AND PMS/CI AND 0>2
T.34
         6225 SEA SPE=ON ABB=ON (L27 OR L28) AND (L14 OR L7 OR L12)
L35
        112029 SEA SPE=ON ABB=ON L22 AND (L33 OR L34 OR L14 OR L7 OR L12)
L36
          6225 SEA SPE=ON ABB=ON L35 AND NC>1
L37
L38
          296 SEA SPE=ON ABB=ON L22 AND (L34 OR L33) AND (L14 OR L7)
    FILE 'CAPLUS' ENTERED AT 16:09:31 ON 29 MAR 2010
              ACT PEZ676CAAU/A
              _____
L39 (
          8848) SEA SPE=ON ABB=ON MORI H?/AU
L40 (
          848)SEA SPE=ON ABB=ON YAMAKAWA M?/AU
L41 (
            8) SEA SPE=ON ABB=ON FUKUMINE M?/AU
L42 (
          124) SEA SPE=ON ABB=ON TOKURA K?/AU
L43 (
           16) SEA SPE=ON ABB=ON L39 AND (L40 OR L41 OR L42)
L44 (
           10) SEA SPE=ON ABB=ON L43 NOT BOMBYX/OBI
            7 SEA SPE=ON ABB=ON L44 AND (ELECTRODE#/OBI OR BATTER?/OBI)
L45
              _____
L46
           281 SEA SPE=ON ABB=ON L38
L47
             O SEA SPE=ON ABB=ON L45 AND L46
L48
         64955 SEA SPE=ON ABB=ON CAPACITOR#/CW
              E BINDERS+ALL/CT
        40291 SEA SPE=ON ABB=ON BINDERS+OLD/CT
L49
             1 SEA SPE=ON ABB=ON L38 AND L48 AND L49
L50
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L51
            28 SEA SPE=ON ABB=ON L46 AND (L48 OR L49)
L52
          5714 SEA SPE=ON ABB=ON L35
L53
        92433 SEA SPE=ON ABB=ON L36
L54
             1 SEA SPE=ON ABB=ON L52 AND L48 AND L49
        14 SEA SPE=ON ABB=ON L53 AND L48 AND L49
366578 SEA SPE=ON ABB=ON (CROSSLINK? OR CROSS LINK?)/BI
L55
L56
L57
          1728 SEA SPE=ON ABB=ON L52 AND L56
L58
            50 SEA SPE=ON ABB=ON L52 AND L56 AND (L48 OR L49)
L59
       277497 SEA SPE=ON ABB=ON L22
       235906 SEA SPE=ON ABB=ON L33
L60
L61
        67665 SEA SPE=ON ABB=ON L34
          735 SEA SPE=ON ABB=ON L14
L62
L63
            59 SEA SPE=ON ABB=ON L7
L64
         23391 SEA SPE=ON ABB=ON L12
L65
             5 SEA SPE=ON ABB=ON L45 AND (L59 OR L60 OR L61 OR L62 OR L63
               OR L64)
               D SCA
        197281 SEA SPE=ON ABB=ON ELECTRODE#/CW
L66
        44983 SEA SPE=ON ABB=ON (DOUBLE LAYER?)/BI
341 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L66
L67
L68
          130 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L67
L69
L70
          104 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L48
         1808 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L49
L71
         17744 SEA SPE=ON ABB=ON (L46 OR L52 OR L53) AND L56
L72
           126 SEA SPE=ON ABB=ON L68 AND (L69 OR L70 OR L71 OR L72)
L73
           37 SEA SPE=ON ABB=ON L69 AND (L70 OR L71 OR L72)
28 SEA SPE=ON ABB=ON L70 AND (L71 OR L72)
L74
L75
L76
           349 SEA SPE=ON ABB=ON L71 AND L72
           25 SEA SPE=ON ABB=ON L73 AND (L74 OR L75 OR L76)
L77
L78
            4 SEA SPE=ON ABB=ON L74 AND (L75 OR L76)
            2 SEA SPE=ON ABB=ON L75 AND L76
L79
           26 SEA SPE=ON ABB=ON (L77 OR L78 OR L79)
L80
            60 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L52
L81
L82
          509 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L53
L83
            12 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L46
L84
           60 SEA SPE=ON ABB=ON (L73 OR L74 OR L75 OR L76) AND L52 AND L53
L85
            O SEA SPE=ON ABB=ON L62 AND L63 AND L64
            60 SEA SPE=ON ABB=ON L35 AND (L73 OR L74 OR L75 OR L76)
L86
           106 SEA SPE=ON ABB=ON (L58 OR L55 OR L51 OR L80 OR L83 OR L86)
L87
           102 SEA SPE=ON ABB=ON L87 AND PATENT/DT
L88
L89
             4 SEA SPE=ON ABB=ON L87 NOT L88
L90
            60 SEA SPE=ON ABB=ON L88 AND (PD<20031024 OR AD<20031024 OR
               PRD<20031024)
     FILE 'REGISTRY' ENTERED AT 16:33:48 ON 29 MAR 2010
               D STAT QUE L35
               D STAT QUE L36
               D STAT QUE L38
     FILE 'CAPLUS' ENTERED AT 16:33:59 ON 29 MAR 2010
               D QUE NOS L58
               D QUE NOS L55
               D QUE NOS L51
               D QUE NOS L80
               D QUE NOS L83
               D QUE NOS L86
L91
           106 SEA SPE=ON ABB=ON (L58 OR L55 OR L51 OR L80 OR L83 OR L86)
          102 SEA SPE=ON ABB=ON L91 AND PATENT/DT
L92
             4 SEA SPE=ON ABB=ON L91 NOT L92
L93
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L94 60 SEA SPE=ON ABB=ON L92 AND (PD<20031024 OR AD<20031024 OR PRD<20031024)

L95 64 SEA SPE=ON ABB=ON (L93 OR L94)
D IBIB ABS HITIND HITSTR L95 1-64

FILE 'HOME' ENTERED AT 16:36:24 ON 29 MAR 2010

D STAT QUE L35 D STAT QUE L36 D STAT QUE L38

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